

Our Ref: 17/001b/DM/21/032

Your Ref:

Essex County Council
Minerals and Waste Planning
Sustainable Environment & Enterprise
County Hall
Chelmsford
Essex
CM1 1QH



For the attention of Mr T Burns

15 June 2021

6 Forbes Business Centre
Kempson Way
Bury St Edmunds
Suffolk
IP32 7AR

t: 01284 764 085
w: pdeconsulting.co.uk

Dear Terry,

Martells Western Extension and Others – Inter relationship between current extraction/landfilling and restoration

I refer to our recent conversation during which we discussed the inter-relationship between the current extraction/landfilling and restoration in the current consented area and the potential effects that may arise due to the proposed western extension.

Reference has been made to point 1 of the Site Profile for the allocated extension area within the adopted Essex Minerals Local Plan which states extraction would not be able to commence until extraction and the necessary restoration has been completed on the latest extension area ref ESS/18/07/TEN (which has now been superseded by ESS/61/19/TEN).

As mentioned within the Planning Application and Supporting Statement, one of the main factors that has caused a delay in the working and restoration of the area is due to Essex County Council imposing Condition 9 onto planning permission reference ESS/23/15/TEN. Condition 9 stated that the working and restoration could not commence until the land adjacent had been worked and restored. This land is not under the Applicants control and therefore they could not undertake the necessary work to allow the area to be restored. Due to this condition, upon taking over the current working area, the Applicant instructed PDE Consulting Ltd to vary the permission in October 2017, with the consent not being issued until 26 September 2018 which then allowed the Applicant to work and restore the current working area in a timely manner as is required under local and national planning policy.

In addition to the restrictive conditions attached to the planning consent, the former operator did not apply for an environmental permit to allow the restoration works to take place through the landfilling of non-hazardous and inert wastes.

Since taking over the site, the Applicant has had to resolve a number of issues to allow the current area to be worked and restored. In addition to the need to vary the planning consent, an application was required to be produced and submitted for an environmental permit to allow the site to be landfilled to be able to fulfill the restoration obligations. An environmental permit application was submitted in February 2018 and was granted by the Environmental Agency on 24 October 2018 (ref EPR/BP3334YQ).

Since the issuing of the environmental permit, the Applicant has been progressing with the engineering works to allow the restoration works to commence. The area is consented to accept inert and non-hazardous wastes, given the nature of the two separate waste streams to be landfilled, complex engineering is required to be undertaken prior to the area accepting waste for restoration purposes to create three separate cells for the two waste types.

In 2019 a Construction Quality Assurance (CQA) Plan was produced and subsequently approved by the Environment Agency. The CQA Plan sets out the engineering required for each of the cells proposed within the area and how this is to be undertaken. An artificial geological barrier (AGB) is required to be engineered along the floor of the void and sidewalls, prior to landfilling. The requirements of this AGB differ due to the two waste types to be imported. The non-hazardous cell is required to be engineered with London Clay and be placed to a depth of 1m and compacted to achieve a permeability of 1×10^{-9} m/s. The inert waste cells will also have an AGB of London Clay but is required to achieve a permeability of 1×10^{-7} m/s. During the engineering works independent third party CQA supervision is undertaken to ensure the works are undertaken in accordance with the approved CQA Plan.

Due to the way consented working scheme for the site, there was an insufficient void space created to allow for engineering works to take place straight away within any of the landfill cells. The Applicant first had to extract a quantity of mineral to allow the engineering works to take place.

The Applicant has made good progress within Cell 1 (non haz cell), the mineral has been extracted which has allowed for the engineering works to be completed to allow the area to shortly accept non-hazardous wastes. The Applicant has also commenced the engineering works within the inert waste cells and so will be able to start accepting inert wastes also, which will see the restoration works commencing across the area.

In addition to the previous factors which have caused a delay to the restoration of the current area, under the terms of the existing permissions for the quarry, planning permission reference ESS/61/19/TEN restricts the amount of vehicle movements to 108 HGV movements per day (54 in and 54 out). The permission also limits the sales of extracted minerals to 125,000tpa. The net effect of this permission, read in conjunction with later consents, is to allow for the sale of 125,000t of primary aggregates per annum, the importation of 250,000t of waste per annum, the onward sale of 175,000t of recycled aggregates per annum and a residue of 45,000m³ per annum then becomes available for site restoration.

This equates to 30,000m³ of inert waste and 15,000m³ of non hazardous waste to infill a void space of 600,000m³. The current area contains approximately 200,000t of sand and gravel remaining which will be exhausted in 2 to 3 years time.

As a consequence of the lack of restoration undertaken by the previous operator and the restrictions placed on the consent with regards to the amount of waste which can be imported, the current area cannot be restored within the current timeframe. As such consent is being sought to extend the current restoration end date and to allow for a further 40,000m³ per annum of non or less recyclable wastes to be imported to the quarry, providing approximately 85,000m³ of waste to be used in the filling of the current void space to allow the area to be restored sooner than is currently feasible under the current planning conditions.

If consent is granted, once mineral extraction has ceased within the site, it is proposed that the remaining void space will be tipped at a rate of around 85,000m³ per annum. The site is permitted to take two different waste streams to fulfil the restoration and, therefore, it is expected that inert waste shall account for approximately 70,000m³ of void per annum with non-hazardous waste amounting to around 15,000m³ per annum. The filling of the inert waste cells will take approximately four years and the non-hazardous cell will take around 21 years. The proposed western extension area contains 752,900m³ of void space which will be filled using inert materials. There is a need to balance the rate of extraction of mineral against restoring the land in a timely manner and also fulfilling the restoration objectives of the current extraction area.

Whilst the applications propose to allow the current and proposed extension areas to be worked at the same time, there will be no overlap with regards to mineral extraction and the tipping of inert wastes within both areas. As proposed, once extraction has ceased within the current area, it will commence within the proposed extension. The western extension will be filled at a rate of around 70,000m³ per annum, the commencement of which will be deferred until 2023 to allow time for a void to be created and also for the inert void in the current working area to be consumed. It is likely infilling shall have been completed in the western extension by 2038 and time will be needed thereafter to complete the restoration. The only area that will be left to be restored within the current area will be the non-hazardous cell, which will take longer due to the nature of the materials and the availability to source these wastes to allow the restoration to be completed.

By working the areas in this way, the restoration of the inert cells will be completed prior to the commencement of the restoration within the proposed western extension area. The non-hazardous waste cell will take longer to complete due to the nature of the wastes to be infilled and the need to balance the working of the proposed extension and current area.

As mentioned within the Supporting Statements there was only 2-3 years remaining of mineral within the current area at the time the application was made and this is obviously now less. The proposed extension area is the only site allocated within the Essex Minerals Local Plan as a preferred site for silica sand extraction. Bucbricks Bunker sand is used by, and contributes to the success of, the elite golf clubs in the UK and to UK golf competition. Of paramount importance to product performance is the consistency of grading and particle shape. SRC Aggregates Ltd produce to a USGA standard and is recognised for this by the only laboratory in the country accredited to test for the industry.

The Applicant's sand products support the RFU Groundsmen Connected programme which is centred around the dissemination of groundskeeping knowledge and providing access to quality, affordable aggregates for the maintenance of our country's grass roots facilities. Specialist turf sands require consistency of grading, cleanliness, and subrounded to rounded particle shape to withstand heavy use.

The Applicant also produces natural filtration grade sands and gravels that require a sub-angular to rounded particle shape in order to capture suspended solids and contaminants in water. A high silica content is essential in a product that must be extremely durable and hard-wearing, allowing it to be precisely graded to facilitate efficient filtering. Sands and gravels currently produced at Martells Quarry are approved countrywide by regional water companies and facilities management businesses in the filtration of rainwater for storage before treatment. The smaller gravel fractions are employed into water filters in domestic applications all the way through to cruise-ship potable water systems.

The NPPF requires the maintenance of at least a ten year landbank to safeguard investment and continued production at existing silica sand extraction sites. If the proposed extension was required to wait until the current area is completely restored this would result in the loss of the only allocated site for silica sand within the County, which would be contrary to national and local policy.

The proposals are in keeping within the how the site and wider area have historically been worked. The site has operated across three parcels of land for a considerable number of years, with mineral processing and waste recycling taking place within the historic areas of the site and extraction and landfilling taking place across two other permitted areas. As such, the proposed developments will not change this aspect which has occurred without complaint for many years.

The Essex Minerals Local Plan and Essex and Southend-On Sea Waste Local Plan has allocated the site as a suitable extension to the existing quarry. The site profiles contained within both policy documents allow the proposed extension to use the existing infrastructure within the wider quarry complex, and do not highlight any concerns with the extension causing unacceptable adverse impacts upon the landscape or residential amenity, provided it is worked on phased basis as proposed.

The proposed applications seek to reflect the way the wider area has historically been worked to ensure the current extraction area is restored in a timely manner, whilst also allowing the continued extraction of silica sand which is a vital aspect in supporting the mineral needs of the County.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'DM', with a long horizontal flourish extending to the right.

David Marsh BEng (Hons) FRICS CEnv MIQ
DIRECTOR
RICS REGISTERED VALUER