



Strategic Planning Committee

Temporary planning permission for an extension to Chard Junction Quarry at Westford Park Farm for the winning and working of approximately 930,000 tonnes of sand and gravel with progressive restoration to agriculture and nature conservation, inclusive of a new internal haul road and the retention of the existing mineral processing facilities and silt lagoons for a period of seven years.

ADDITIONAL UPDATE SHEET – 03/09/21

Date of Meeting: 6th September 2021

Portfolio Holder: Cllr D Walsh, Planning

Lead Officer: Robert Jefferies

Application Number WD/D/19/000451

Site address – Chard Junction Quarry, Westford Park Farm, Thorncombe, Chard

Proposal - Temporary planning permission for an extension to Chard Junction Quarry at Westford Park Farm for the winning and working of approximately 930,000 tonnes of sand and gravel with progressive restoration to agriculture and nature conservation, inclusive of a new internal haul road and the retention of the existing mineral processing facilities and silt lagoons for a period of seven years

Applicant name – Aggregate Industries UK Ltd

Ward Members – Cllr Simon Christopher

UPDATES

Following the previous update sheet, Members should be made aware of three further matters that have arisen. They concern the consultation with Somerset County Highways Authority, the submission of a Technical Report submitted on behalf the Stop the Dorset Quarry Action Group and a subsequent response to the Technical Report by the applicant.

Consultation with Somerset County Council Highway Authority

As detailed in paragraph 7.4 of the Committee report, a relatively small area of the current application site (the corner of an existing silt lagoon) is located within the County of Somerset. Where an application straddles a county boundary, the provisions of Section 101 of the Local Government Act 1972, prescribe that neither Authority has the power to determine the application without a discharge of functions being granted by the other. Somerset County Council (SCC) resolved to delegate its functions on the application to Dorset Council subject to SCC in its roles and mineral planning authority and highway authority, together with the local Divisional Member, being consulted for their views regarding the application.

Whilst SCC has been consulted on the original application and subsequent revisions, it has been confirmed that Somerset County Highways Authority did not receive the consultation request.

On this basis Somerset County Highways Authority will now be directly consulted on the proposal.

In light of the above the recommendation to Members of the Strategic Committee has now been amended to read as follows:-

Recommendation: That planning permission be granted subject to the conditions set out in paragraph 17 of the report and the prior completion of a S106 agreement in accordance with the draft Heads of Terms as detailed under paragraph 6.127 of the report and subject to no further issues of concern being raised by the Somerset County Authority that have not already been considered as part of the assessment of the application.

Technical Report submitted on behalf the Stop the Dorset Quarry Action Group

A document entitled 'Technical review of Planning Application WD/D/19/000451; Chard Junction Quarry, Westford Park Farm, Thorncombe, Chard' has been produced and submitted on behalf of the Stop the Dorset Quarry Action Group. The report was submitted on 1st September 2021. The full report can be viewed on Dorset Councils website at the following address - <https://plan.dorsetcc.gov.uk/Planning/Display?applicationNumber=WD%2FD%2F19%2F000451>

The report states that its purpose is to consider whether, balancing all of the considerations for and against the proposed development, a new quarry excavation in the proposed location, implemented in accordance with the Planning Application would meet the "exceptional circumstances" test as set out in paragraph 172 of the National Planning Policy Framework.

The principal technical points raised within the report are outlined below followed in each case by the officers response.

1) No geological/resource report is included with the planning application itself or as a technical appendix to the Environmental Statement. Furthermore, no geological details are shown on the Application drawings depicting the phasing of quarrying and restoration. This is surprising, given that the three-dimensional configuration of the deposit, overburden and channel fill materials is the principal constraint for designing stable quarry excavations and determining the volumes and tonnages of recoverable

mineral and quantities of overburden and channel fill to be excavated, stored and replaced.

Basic key assumptions that must have been made to support the resource estimates and the scheduling of waste volumes in storage and final placement are not given and it is therefore not possible to make even a rough check that volume estimates make sense, that bulkage of tipped materials has been taken into account in tip design and placement in restoration, that the conversion from cubic metres of sand and gravel in the ground to tonnes of saleable product is reasonable, and that the quantity of process waste (silt) in the as-dug sand and gravel has been correctly calculated.

Officer Response: It is noted that geological plans and cross sections illustrating the geological setting are included in Technical Appendix I.1 to the Environmental Statement (Hydrology and Hydrogeology) and in Appendix 5 to the Regulation 25 submission (Addendum to Hydrology and Hydrogeology Report). In addition, tonnages of mineral expected to be recovered from each phase of working, and the volumes of soils and overburden expected to be excavated and stored or placed in restoration are stated for each phase of working in the Environmental Statement and the Planning Statement for the originally submitted scheme and in the Regulation 25 submission for the revised scheme.

The Mineral Planning Authority does not have the technical knowledge to assess the three-dimensional configuration of the geological deposits in order to establish whether the proposed quarry operations would be stable and precisely reflect the volumes of mineral deposit as well as overburden/topsoil storage volumes proposed. The applicants have developed a scheme for consideration based upon the calculations they have derived through their geological assessment of the site. If the applicants cannot accord with the working schemes they have proposed and that are secured by planning condition, such schemes would have to be amended through the appropriate process.

2) There are two lengths of the proposed haul road where gradients exceed the commonly accepted safe maximum of 1v to 10h:

- approximately 35m at a gradient of 1:6 along the western edge of Phase 2a; and
- approximately 90m at gradients of between 1:4 and 1:6 to the north and south of the point at which the haul road crosses the southern watercourse.

It is not clear how the repeated realignment of the haul road within the extraction area can be achieved efficiently and safely without interrupting the operation and whilst maintaining the road to a standard suitable for all the vehicles that will use it.

Application drawings show a quarry floor at 45mAOD; clearly this is at least 5m below the groundwater table and it is therefore apparent that wet working will need to take place. However, the layout of the advancing face and haul roads shown does not allow for this. Indeed, vehicles travelling along the lower haul road (which leaves the main haul road at the south side of Phase 2b and rejoins it at the south side of Phase 3a having reached the floor of the pit at 45mAOD) would have to travel underwater for much of the length of this road!

Officer Response: It is the responsibility of the operators to operate the site safely. It would be the responsibility of the applicant to design the precise alignment of internal haul road and to only use it when ground water levels permit. It is noted that quarrying operations have to cease within the current extraction area at Carters Close when the ground water levels rise to unworkable levels. In addition, it is considered that any amendments to working practices, haul road alignment or gradient required to operate the site safely would appear to be minor and can be adequately dealt with under condition 26 of paragraph 17 of the Committee Report.

3) The Southern Watercourse will be culverted where it is crossed by the main quarry haul route (which will remain in place throughout the life of the quarry). Unless carefully designed, this structure has the potential to restrict flow in the watercourse and cause backing up and flooding in the stream if it becomes blocked or is of an inadequate size and specification.

Furthermore, it is evident that sediment laden surface runoff when soils are stripped from Phases 1 and 3b (to the south and north respectively) has the potential to enter the Southern Watercourse with consequences for water quality. This is an impact that should be also have been assessed.

Officer Response: Condition 30 proposed under paragraph 17 of the Committee Report requires a detailed working methodology to be submitted prior to works commencing in each phase. This is in addition to the requirement for a detailed surface water management scheme to be submitted for each phase prior to extraction. The surface water management scheme will provide detailed designs to demonstrate how surface water is to be managed during extraction and confirm responsibilities and maintenance schedules for proposed drainage features. It is considered that through the above conditions surface water and associated drainage features will planned and managed appropriately.

4) The 1:3 excavation in the silty clays that fill the glacial channel is deemed to be a stable excavated slope gradient based on geotechnical analysis, but no details of this (or any other design assumption for the excavation) are provided in the supporting documentation. It is therefore surprising to note that excavated slopes of 1:2 are proposed in Phase 3. The implication of this is that the clay slopes at this steeper angle may have been over steepened and this could have stability implications for the eastern faces

The maximum thickness of overburden materials placed in the quarry void against the eastern excavated slope will be around 10m in the revised scheme, the lower 5.5m of which will be below the level to which the pit is expected to flood. As no dewatering will take place, it is unclear as to how placement in 2m layers in the flooded workings can be achieved and this has implications for the long-term stability of the fill materials placed against the face.

With reference to the overburden and soil storage mound to the east and south of the Phase 1, foundation gradients exceeding 1:12 towards the excavation, proximity of the northern toe of the structure to the crest of the excavation, lack of drainage provision, and extremely steep north and west faces (>1.1) give rise to significant uncertainty as to whether this structure can be constructed and, later removed and regraded using a safe and efficient method of working.

Officer Response: Officers consider that condition 26 proposed under paragraph 17 of the Committee Report requires a detailed working methodology to be submitted prior to works commencing in each phase. Furthermore, it is the responsibility of the applicant to operate the site safely. The applicants have noted in their response that the Quarries Regulations (1999) will continue to form the basis of health and safety management at the quarry (as is the case for all UK Quarries). These Regulations include a significant geotechnical component and will be complied with at all times.

Officers Conclusion:

In conclusion, it is considered that the matters raised in the submitted Technical Report are details that can be adequately dealt with through the schemes currently proposed to be secured through planning condition, have been appropriately considered or are controlled through other legislation and regulatory bodies.

Applicants Response to Dorset Quarry Group Technical Report

Following the submission of the report by the Stop the Dorset Quarry Action Group, the applicant's have responded to the issues raised. The full report can be viewed on Dorset Councils website at the following address -

<https://plan.dorsetcc.gov.uk/Planning/Display?applicationNumber=WD%2FD%2F19%2F000451>

The principal points raised by the applicants are as follows:-

- 1) In respect of more detailed geotechnical comments made in the report - i.e. questioning the stability of the excavated overburden slopes (which will subsequently be restored to shallow angles through the placement unprocessable overburden and soils) and raising the issue of short lengths of the haul road not being the correct gradient - is an over interpretation of phasing plans prepared for the planning application. Similarly, the below water restoration filling (raised as an issue in the report) will be designed and implemented with geotechnical supervision to ensure safety and stability. In our view all the geotechnical and design issues brought up in the report are easily capable of being dealt with as part of the detailed phasing plans that will be prepared prior to working commencing, as required by the proposed condition for detailed phasing plans.
- 2) The Quarries Regulations (1999) will continue to form the basis of health and safety management at the quarry (as is the case for all UK Quarries). These regulations include a significant geotechnical component and will be complied with at all times. The site will be operated in a safe manner.
- 3) The same applies to surface water where the outline mitigation measures outlined in Table 4.1 of the submitted Flood Risk Assessment are still relevant to the revised scheme. Drainage can still be installed under soil and overburden storage areas, cut off ditches can be provided and in the event of exceptional rainfall events runoff can still be contained and managed within the site without increasing the risk of flooding elsewhere.

4) Section 2.5.4 of the report it states "...*gradients exceed the commonly accepted safe maximum of 1v to 10h...*" This statement is footnoted with a reference to a published handbook, as well as a hyperlink to the HSE guidance on haul roads. The only guidance on road gradients on that page refers to 1:10 being 'guidance' for rigid vehicles. As the report already mentions (2.4.1) we would be using Volvo A40 or similar which is an articulated vehicle which is capable of dealing with steeper gradients. Our own internal IMS standard (HS18) relates to Excavations and Taps, and via the use of HS18/F01 standard E&T rules, allows for ramps to be constructed to steeper gradients, and again reinforces the requirement for them to be designed by a competent individual and constructed as per the design. In conclusion, it is our view that 1:10 is not 'commonly accepted safe maximum'.

Officer Response:

The applicant's comments are noted.