



CRESTWOOD ENVIRONMENTAL LTD

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Non-Technical Summary

Bespoke Environmental Permit Application for the Deposit of Inert Waste for Recovery

Beam Quarry, Torrington, Devon, EX38 8JF

Report Reference: CE-BQ-1936-RP05-NTS-Final

Report Date: 27 October 2021

Produced by Crestwood Environmental Ltd.

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VISUALISATION

Crestwood Report Reference: CE-BQ-1936-RP05-NTS-Final:

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Final	27/10/2021	Louise Parsons BSc (Hons), MSc	Andrew Abbott BSc (Hons), MSc

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Drawing No CE-BQ-1936-DW01

Environmental Permit Boundary

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1 Introduction

- 1.1.1 L J Developments Ltd (**the Client**) seeks to vary the approved scheme of works outlined within the Planning Permission (application number: 1/0423/2014/CPZ; reference: DCC/4223/2021) to extract the remaining mineral and infill the quarry void to create an access path to the first bench at Beam Quarry, Torrington, Devon, EX38 8JF (**the Site**). The most recent Planning Permission (1/0140/2021/CPZ) was consolidated and granted in 2021 to permit infilling operations with imported inert materials, recycling and for the operation of a waste transfer facility until 2036. The proposal will be in accordance with an approved landscaping restoration scheme to achieve the following objectives:
- Enable safe access to a variety of geological features of interest;
 - Provide rock traps and access for face drainage works therefore improve the overall safety at the Site;
 - Adhere to the requirements of the planning permission to provide a detailed restoration and aftercare scheme;
 - Enhance biodiversity and improve the landscape and visual aspects of the area, and
 - Provide an alternative inert waste facility in North Devon that would allow a significant reduction in the distance that waste is transported.
- 1.1.2 Since the 1930s, the Site has been an established quarry extracting mineral comprising of sandstones, shales and sedimentary gritstone pertaining to the Bude Formation for the use in construction aggregates and building stone.
- 1.1.3 The Site benefits from planning permission, the most recent of which was consolidated and granted in 2021 (ref: 1/0140/2021/CPZ) to permit the extraction of mineral, infilling operations with imported inert waste materials, recycling and for the operation of a waste transfer facility until 2036.

2 Proposed Scheme

- 2.1.1 The proposed phased restoration scheme, approved by Devon County Council on 17 May 2021, includes depositing strictly inert wastes deriving from construction and landscaping arisings from projects in North Devon undertaken solely by L J Developments Ltd.
- 2.1.2 Soils and sub-soils will be sourced from the inert materials and retained for the final restoration phase involving the covering of the landform and the quarry floor. This will allow for the planting of native grasslands and vegetation as specified in the Landscape Management and Aftercare Scheme prepared by David Jarvis Associates on behalf of the Client.
- 2.1.3 Based on cross-sections of the landform and landscape modelling, a Phasing Scheme produced by QuarryDesign showed that to achieve the required contours with the least amount of material possible, a total of 96.996 m³ (145,494 tonnes) of material is required to complete the restoration of which 10,000 m³ (15,000 tonnes) will comprise soils and sub-soils.
- 2.1.4 This amount of infill is substantially less than the initial proposal of 200,000 m³ (300,00 tonnes) as outlined in the Pre-Application Advice Request submitted to Devon County Council in July 2019. It is important to note that the 2014 planning conditions do not restrict the amount of mineral extracted nor the amount of inert material imported for infilling or recycling at the Site.
- 2.1.5 In the response Devon County Council provided details on matters to be included in the application to vary the restoration proposals. As such, these conditions have been addressed in the planning application submitted in January 2021 to vary the approved working and tipping schemes and submission of restoration proposals to discharge Condition 17 of planning permission reference: 1/0423/2014/CPZ.
- 2.1.6 It is proposed to extract the remaining mineral to avoid sterilisation of the reserve to a depth of 20.5 mAOD. It is anticipated that this phase of the project would be finalised in six years and would allow for the construction of stable platform on which to construct the access track comprising of the inert waste. This will enable the access to the important geological exposures at the Site which is a designated Regionally Important Geological and Geomorphological Site (RIGS) and a Devon County Geological Site.



- 2.1.7 The phases of work will take place in two-year periods and will take a total of ten years to achieve the final restoration profile.
- 2.1.8 Currently, surface runoff from the east of the Site discharges to a central sump. Any excess water is discharged via subsurface pipes to the adjacent stream, the Mill Leat located along the southern boundary. In the western half of the Site, site runoff accumulates on the quarry floor within the void until it overflows into a gap in the Mill Leat's bank and enters the stream.
- 2.1.9 As infilling progresses, the gap in the bank of the Mill Leat will be closed and all surface runoff will drain to an attenuation lagoon constructed in the south-east edge of the quarry void. Discharges from the attenuation lagoon will be regulated and restricted to greenfield rates by either a weir or an overflow pipe.
- 2.1.10 This Non-Technical Summary supports an application for a Bespoke Waste Recovery Permit for the Site so as to finalise in accordance with the proposed landscaping scheme. It should be read in conjunction with the Environmental Management System (EMS) (report reference: CE-BQ-1936-RP04-EMS-Final), the H1 Accidents and Amenities Risk Assessment (report reference: CE-BQ-193-RP06-H1-Final), the Site Condition Report (report reference: CE-BQ-1936-RP02-SCR-Final), the Climate Change Risk Assessment (report reference: CE-BQ-1936-RP01-CC-Final), the Hydrogeological Risk Assessment (report reference: 2908_HRA_F1 (Nov 21) complete), the Stability Risk Assessment (report reference: 00464_200528_SRAR_Beam Recovery Permit Rev 1) and the Waste Recovery Plan (report reference: CE-BQ-1936-RP03-WRP-Final) which collate to form the application to permit a Waste Recovery Operation.
- 2.1.11 The proposed Environmental Permit boundary is shown on Drawing No. CE-BQ-1936-DW01.

3 Gas Monitoring

- 3.1.1 The area of the Site is circa five hectares. It is proposed to install one gas monitoring borehole in each phase once restoration material levels have reached the restoration contours shown on the proposed scheme. The boreholes will be monitored every month for methane, carbon dioxide, oxygen and atmospheric pressure.
- 3.1.2 The gas monitoring is not anticipated to record elevated levels of methane or carbon dioxide as waste types will be strictly inert. It is purely an additional quality control measure to ensure only suitably inert materials have been deposited.
- 3.1.3 The gas monitoring boreholes will be installed from the base of the Site to the restoration contours shown on the proposed scheme once final levels have been reached. These boreholes will be fitted with a gas tight removable cap fitted with a sampling valve and will be protected by a steel, lockable cover. The boreholes will be installed by a suitably experienced and qualified contractor/drilling company.
- 3.1.4 Gas monitoring boreholes will be inspected during monitoring for any indications of damage. If any damage has been identified repairs and replacements will be carried out as soon as reasonably possible in accordance with the Management System.
- 3.1.5 A copy of the gas monitoring results will be kept by the Operator and will be made available for inspection to authorised Environment Agency officers.

4 Waste Types

- 4.1.1 Only strictly inert materials will be accepted at the Site.
- 4.1.2 Material will originate only from projects undertaken by L J Developments Ltd. No third-party deliveries will be accepted at the Site. L J Developments are familiar with Waste Acceptance Criteria (WAC testing) therefore wastes that require laboratory testing will only be accepted at the Site where a copy of the analysis is submitted to the Operator for inspection to ensure that only suitably authorised materials are accepted.
- 4.1.3 Waste delivered will also be required to comply with the Duty of Care, as required by the Waste (England and Wales) Regulations 2011. Written information will be required from L J Developments Ltd about the specific details of the type of process producing the waste (source), the type of waste and the quantity of waste. An assessment will be made to ensure that the waste is suitable for deposit at the Site and use in the works.
- 4.1.4 Only wastes which have been subject to the above checks will be accepted at the Site.



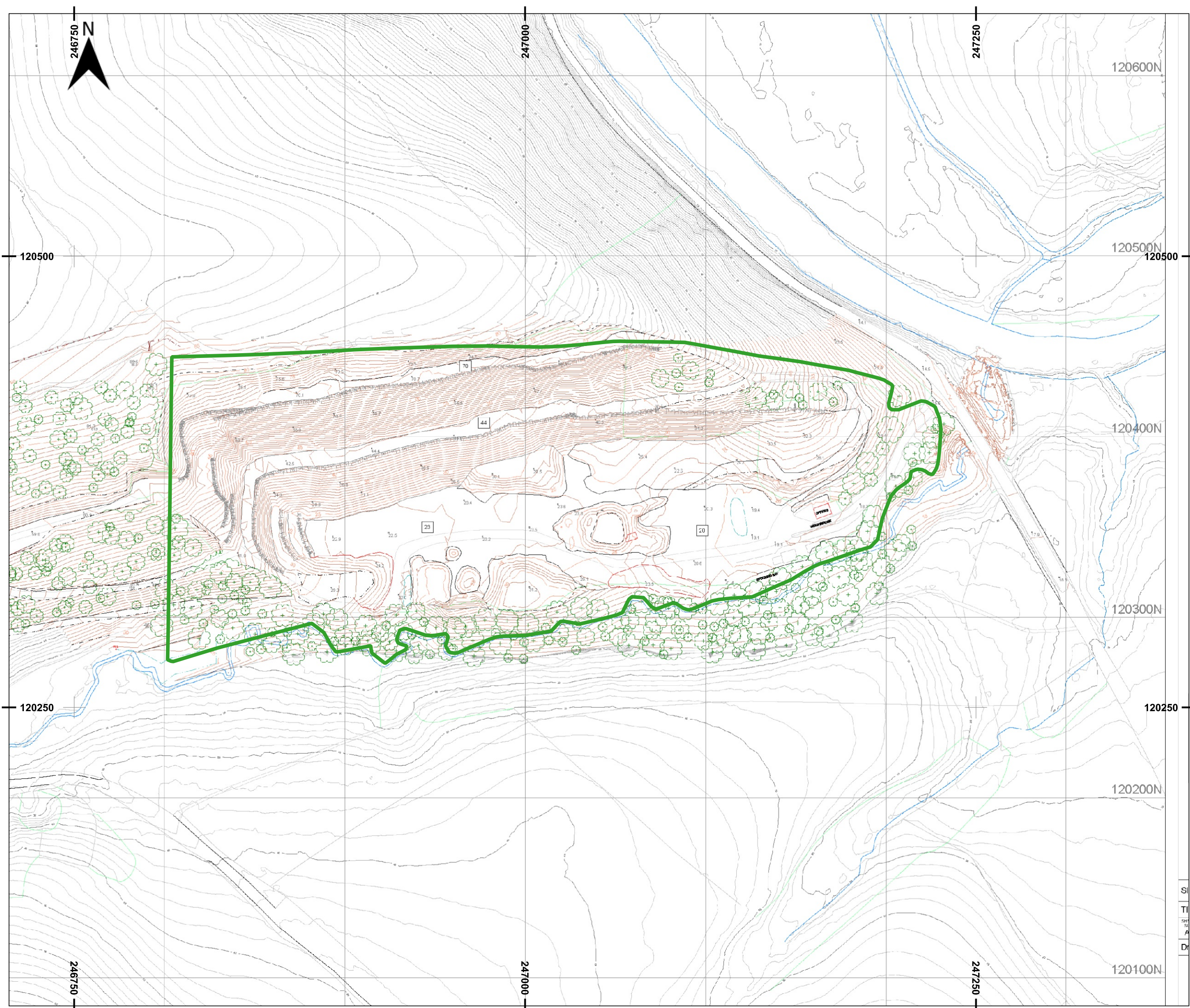
- 4.1.5 A visual inspection of the contents of waste loads will be made by Site staff on deposit of the waste load.
- 4.1.6 Any discrepancies found, i.e. suspect, non-conforming and/or random loads, as a result of the checks detailed above will result in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:
- Referral to the Site Manager;
 - Referral to the waste producer to confirm the nature of the waste load;
 - Referral to the Environment Agency;
 - Redirection of delivery vehicle off site, to a suitably authorised facility; and
 - If the waste has been discharged, removal of the waste to a secure quarantine area, prior to off-site removal either to the waste producer or suitably authorised facility.
- 4.1.7 Any waste materials dispatched off site to an authorised facility in accordance with the Duty of Care.
- 4.1.8 Due to the inert nature of the materials accepted at the Site, no leachate or contaminated water will be produced as a result of the activity and therefore it is not anticipated that there will be any short term or long-term changes in water quality over time.

5 Waste Quantities

- 5.1.1 The amount of inert material required to restore and regrade the Site has been calculated based on current site levels and the restoration contours detailed in the Phasing Scheme produced by QuarryDesign on behalf of the client.
- 5.1.2 The work shows that, at a minimum, approximately 96,996 m³ of inert materials, soils and subsoils will be required. This equates to about 145,494 tonnes of inert materials.

6 L J Developments (South West) Limited

- 6.1.1 L J Developments Ltd recognises its need to operate the business in a manner which reflects good environmental management and is aware of the need to protect the local and global environment. The Company operates an Environmental Management System (EMS). A Management System is in force for the Site to ensure operations are undertaken in accordance with all relevant environmental legislation and best environmental practice.
- 6.1.2 The Site will be managed by WAMITAB (Waste Management Industry Training and Advisory Board) accredited staff to ensure compliance with all regulatory requirements and the conditions of the Environmental Permit.
- 6.1.3 The Site will be subject to independent inspections by the Environment Agency as part of the Environmental Permitting process.



Legend:
 Permit boundary

Final Revision:	Date:	Description:	By:	Chk:

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Client:

QuarryPlan

Site: Beam Quarry

Drawing Title: Proposed permit boundary

Date: 25 / 10 / 2021	Scale: 1:2,000	Paper Size: A3 (420x297mm)
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Drawn By: AA	Checked By: ST	Status: FINAL	Final Revision: -
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Drawing Ref: CE-BQ-1936-DW01

Drawing No: Figure 1

