Castle Hill Quarry Co. Limited
Castle Hill Quarry
Cannington
Bridgwater
TA5 2QF

Our ref: HB3606SS/A001
Your ref:

Date: 04/12/2019

Dear John,

Environmental Permitting – Recovery or Disposal Operation
Pre-application Reference: EPR/HB3606SS/A001
Proposed Operator: Castle Hill Quarry Co. Limited
Regulated facility: Castle Hill Quarry
Site Address : Cannington, Bridgwater, TA5 2QF

As part of our pre-application discussions, you have submitted information to us that includes your assessment that the activity you wish to undertake at your site amounts to a recovery operation.

We have now fully considered your submission and we would like to advise you that:

We agree with your assessment that your activity is a recovery operation. This advice is based on the information you have provided in relation to waste types, amounts and nature of proposal including any proposed landform. If you change any of these between now and when you submit an application form, this advice may no longer apply. **Please also note that following submission of an application, additional assessment will take place (for example, further assessment of the proposed waste types based on the sensitivity of the site location) and therefore agreement that an operation is a recovery activity does not guarantee that a permit will be granted or a variation issued.**

For the sake of clarity, the following documents are considered to form the approved waste recovery plan;

- Waste Recovery Plan, Ref 430P, dated 03rd July 2019.
- E-mail confirming waste types, dated 13th August 2019.
- Test of Meaningful Financial Gain, dated 29th November 2019.

If you have any questions please phone me or email anna.gribben@environment-agency.gov.uk

Yours sincerely

Anna Gribben

Permitting Officer

Castle Hill Quarry Co Ltd

Castle Hill Quarry, Cannington, Somerset.

Waste Recovery Plan

Ref: 430P

3rd July 2019

Land & Mineral Management

Notice

This report was produced by Land & Mineral Management for Castle Hill Quarry Company Limited, for the specific purpose of providing a Waste Recovery Plan for Castle Hill Quarry's Eastern Extension.

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Document Control

Version	Date	Author / Checked by	Change Description
DRAFT	28.6.2019	JS /CH	Document created and reviewed
Version 1	3.7.2019	JS	Final

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CASHEXT1610/1/C	Location Plan
CASHEXT1610/2/C	Application Plan
CASH 1610/3/C	Eastern Extension Area Excavation Design
CASH 1610/4/C	Proposed Restoration Landform
CASH 1610/5/C	Cross Sections
CASH 1610/6/C	Final Restoration Plan – Whole Quarry
CHILL016 (D)	Composite Restoration Scheme

Appendices

Planning Inspector's Decision Report 21.6.2019

1 Introduction

Recovery Operation

1.1 The recovery operation is to allow the reinstatement of land, after quarrying to produce a scarce mineral product, to its original topography. The purpose of reinstatement by infilling is to ensure the long term protection of the setting of a Scheduled Monument as deemed to be essential by a Planning Inspector following a planning appeal. The land will be returned, at original ground levels, to a combination of woodland, and dry grassland thus enhancing biodiversity.

1.2 The main aim of the recovery operation is to replace non-waste material that would otherwise have to be used for reinstatement, with imported inert materials, which are able to perform the same function, providing a useful purpose by using fewer natural resources.

The Site

1.3 Castle Hill Quarry is located between Bridgwater and the Bristol Channel about 1 km north-west of Cannington and 1.5 km south-west of Combwich. The Site is at NGR ST 3248 1407 (nearest postcode TA5 2QF).

1.4 Plan No. CASHEXT1610.1.C shows the location of the site within the land owned and controlled by Castle Hill Quarry Company Ltd. Plans 2.C to 6.C in the same series show the proposed working of the extension area and restoration. A landscape architect's comprehensive restoration scheme is also separately depicted.

1.5 The small, proposed extraction area comprises a mosaic of sheep grazed grassland, rank grassland, bramble and thorn. It includes some regenerating elm scrub and newly planted hedgerow. Much of it comprises land within the quarry void and part of the quarry stock yard.

1.6 The area of proposed extraction is approximately 0.95 ha within a planning application area of 1.4 ha.

Environmental Permitting and Requirement for a Waste Recovery Plan

1.7 To undertake the necessary reinstatement work, by recovering imported inert materials in an environmentally sound manner, an Environmental Permit is required. The permitting procedure requires confirmation from the Environment Agency that the operation is a recovery activity, with the approval of a Waste Recovery Plan ("WRP"). This document is the WRP.

1.8 This WRP has been prepared in line with current guidance provided on the gov.uk website 18th October 2016, Waste Recovery Plans and Permits (https://www.gov.uk/guidance/waste-recovery-plans-and-permits) ("the guidance").

1.9 The activities are a recovery operation with the '*waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or wider economy.'*[1] European Court case law confirms the essential characteristic of a waste recovery operation in that its principal objective is that the waste serves a useful purpose in replacing other materials which would have had to be used for that purpose, thereby enabling natural resources to be preserved.

1.10 This WRP confirms there is a firm legal obligation to undertake the reinstatement work following the extraction of stone and confirms that the operation is therefore a recovery activity.

1.11 Planning permission was secured in June 2019. The planning application which was made in January 2017 was subject to environmental impact assessment. In the course of that process the need to infill the void formed by the extraction of high purity limestone used in the production of animal feedstuffs was established in consultation with Historic England. Adjoining the excavation site is a Scheduled Monument, an ancient hill fort. It was determined that the setting of the Scheduled Monument would not be adversely impacted provided that, within a reasonable timescale, the extracted rock would be replaced with suitable materials to reinstate the original ground levels and return the land to a similar use as currently exists.

1.12 Planning permission was delayed by the local planning authority, due to lack of human resources, eventually prompting an appeal for non-determination of the application. The appeal was the subject of a public hearing in May 2019 wherein the Inspector examined in detail the need for reinstatement. He agreed with Historic England that the void must be restored to protect the long-term integrity of the Monument and determined that until a Recovery Permit is gained, which ensures that the original ground levels can be reinstated, extraction should not commence. This was clearly a pragmatic way of ensuring that both the setting of the Scheduled Monument and the groundwater would be fully protected.

[1] Article 3(15) of Directive 2008/98

2 Waste Recovery Activities

2.1 Site restoration could be undertaken with non-waste material, i.e. virgin mineral materials. However, using waste material as opposed to virgin material will conserve natural resources.

2.2 The guidance outlines three ways to show evidence that waste is to be used in place of non-waste:

- Financial gain by using non-waste materials;
- Funding to use non-waste;
- Obligations to do the work.

2.3 The grant of planning permission legally obliges the operator to infill the land and comply with the approved restoration plan. The restoration plan requires importation of an estimated 119,000 cubic metres of inert materials to infill the quarry void. Using a general rule of thumb conversion factor of 1.5 tonnes per cubic metre (as recommended for inert waste in Paragraph 9.5.2 of Excise Notice LFT1: A General Guide to Landfill Tax Nov 18), 178,500 tonnes is anticipated to be required which was, in the planning process, rounded to 180,000 tonnes.

2.4 The key planning policy driver that has influenced the requirement to infill has been the protection of the Scheduled Monument. Historic England corresponded with the applicant's Cultural Heritage consultant and confirmed that, provided the site is backfilled, there will be no impact on the setting of the Scheduled Monument. The site operator is a quarry company and not a waste operator and would have preferred to leave the extension area as an open void. However, it has agreed to the requirement to infill and has agreed to the requirement not to start extracting until such time as an Environmental Permit is in place to enable eventual infilling.

2.5 The Restoration Scheme proposes returning the land to a mix of woodland, scrub and wildflower grassland thereby enhancing the biodiversity of the restored quarry area. Restoration can only start following completion of extraction which is expected to take three to four years. A time frame of up to ten years is expected to enable the land to be returned to original ground levels and planted to the required afteruse. The development proposals have been the subject of detailed technical ecological and hydrological assessment through the environmental impact assessment process to ensure that the proposals are not only fit for purpose to satisfy land-use planning requirements but will also ensure the long term protection of the water environment.

Specific Obligations

2.6 Evidence of the legal obligation as described above is very clearly stated by the Inspector in his decision dated 21st June 2019. This is attached at Appendix A in this WRP.

2.7 The Inspector imposed conditions which impart the legal obligation on the operator. In particular condition 36 states: "*The site shall be backfilled and reclaimed in accordance with the levels on approved plans CASHEXT1610.4.C and CASHEXT1610.5.C dated 25 October 2016. The backfilling shall be completed within 5 years of cessation of working the land"*. The Reason for the condition is, "*… to ensure the protection of the setting of the Scheduled Monument*".

2.8 To ensure that the infilling actually takes place and that the stone is not extracted leaving an empty void, the Inspector imposed a "*Grampian*" condition which he said was essential to protect the Scheduled Monument and the water environment. The condition (No. 26) states; "*No extraction shall commence until an Environmental Permit has been issued in accordance with the Environmental Permitting Regulations. The permit shall directly relate to the extraction area outlined on plans CASHEXT1610.3.C and CASHEXT1610.4.C and CASHEXT1610.5.C. The working programme to backfill the void with inert material shall accord exactly with all matters regulated by the Environmental Permit including that only inert materials shall be deposited and specifying the Waste Acceptance Criteria to be adopted*". The Reason for the condition is, "*To ensure that the setting of the Scheduled Monument is not prejudiced by the commencement of extraction without the ability to restore*". He confirmed that such negatively worded conditions are not commonly used but they can be considered in exceptional circumstances and he considered the necessity of protecting the Scheduled Monument by infilling to ensure that the land is not left as a void to be exceptional.

2.9 By restoring the land to its original ground levels, in accordance with the approved plans, the waste recovery operation will not only ensure the protection of the Scheduled Monument's setting but will also deliver biodiversity benefits.

Wastes Suitable for Use

2.10 A wide range of inert wastes (particularly silts and clays) would be suitable to reinstate the void after quarrying. However, the stone reserve which is quarried is used in the production of animal feedstuffs and is sold to feed mills throughout the south-west of England. The material is regularly tested for FEMAS accreditation. The Feed Materials Assurance Scheme covers all feed materials intended for direct feeding to animals or for inclusion in compounds and blends. Therefore it is critical to the quarry operator to ensure that nothing is brought into the quarry in any waste

material which could threaten the integrity of the purity of stone before it enters the food chain. The main qualification will be that no liquids or powders will be imported. The physical and chemical characteristics of any materials imported must be such, from the operator's point of view, that they will not give rise to any possible pollution risk.

2.11 The operator will therefore ensure that none of the waste materials to be imported will be from any site which has any indication of being contaminated nor will any wastes be accepted which contain dangerous substances. Strict waste acceptance procedures will be adhered to and will be provided for in a management system which controls how operations will take place in a manner designed to protect the environment.

2.12 The specific waste codes of the inert materials will be determined as part of the Hydrological Risk Assessment to be carried out at the Permit application stage and agreed with the EA. The precise range of wastes to be agreed will not impact on the recovery nature of the proposal.

Amount of Waste

2.13 The restoration scheme details, including cross sections, are illustrated on the attached plans. The amount of material required for the recovery activity has been based on the volume of mineral which will be extracted. This volume (119,000 m^3) is believed to be an accurate calculation but may potentially be subject to change based on the resulting void space generated during extraction. Some quarry waste, which comprises a stiff clay, will be replaced in the void. It could be used to form an artificial geological barrier between half and one metre thick on which the infilled material would sit and that would reduce the volume of imported material required.

2.14 Much of the extraction area surface has been 'made up' with subsoil deposited in historic quarrying operations. No more than a thin veneer of undisturbed topsoil and half a metre at most of overburden lies within the remaining area. Any which exists will be stored in bunds during mineral extraction and re-spread as part of the restoration works.

Substitution

2.15 In terms of suitable non-waste material that could be used instead of waste materials, the works could be completed using a low-grade fill material suitable to be engineered. This could be either a primary aggregate or clay, sourced as a primary land-won aggregate, or a recycled aggregate. However, using primary won or even secondary aggregate in this way and transporting them to the site whilst at the same time transporting inert waste materials to a landfill site elsewhere instead of Castle Hill Quarry would be entirely against all principles of sustainability.

Operation to Appropriate Standard

2.16 The infilling work will comply with planning condition requirements, the approved plans (see attached) and the environmental permit conditions. The infilling work will also comply with a full management system and strict waste acceptance procedures. This is crucial to ensure not only the protection of the groundwater but also that nothing is introduced into the quarry which could impact on the integrity of the high purity stone and the ability for it to enter the food chain.

2.17 The material brought to site will comply with strict waste acceptance procedures then placed into the prepared excavated void.

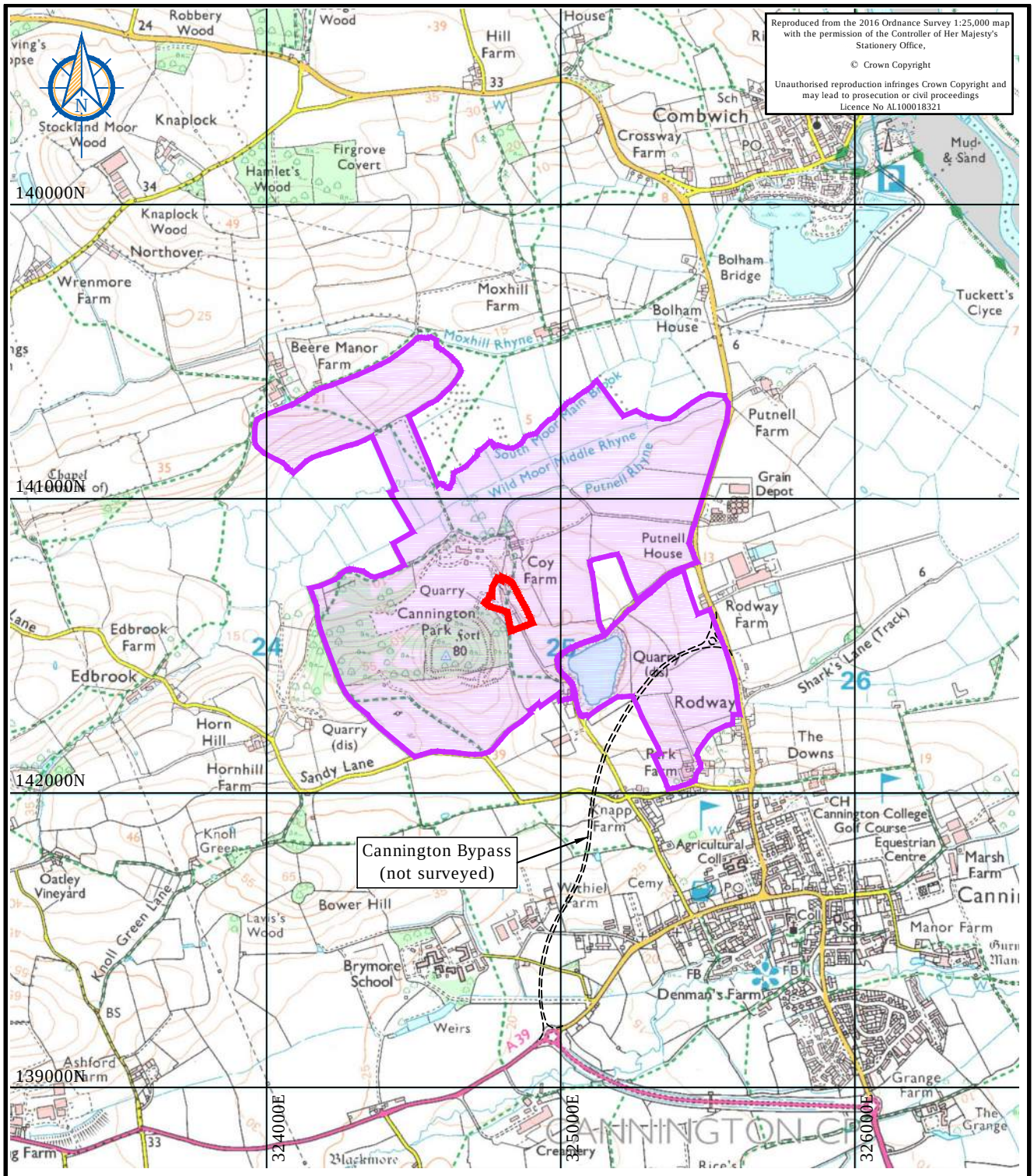
2.18 The material will be placed using earthmoving equipment, primarily dozers, and will be shaped into the appropriate landform configuration as shown in the restoration designs. Soil handling guidelines will be followed, including the MAFF (2000) Good Practice Guide for handling soils and the Defra 2004 publication "*Successful Reclamation of Mineral and Waste Sites*". Planning conditions require the approval of a Landscape and Ecological Management Plan (LEMP), incorporating details on restoration and aftercare management and full compliance thereof.

3 Conclusions

3.1 Planning permission granted by a Planning Inspector on appeal for non-determination of a planning application imposes a legal requirement firstly, not to start extracting until an environmental permit is in place which permits infilling and secondly, to complete the infilling within five years and restore the surface of the quarry for environmental benefit. The scheme ensures that there will be nil or neutral adverse impact on the Scheduled Monument provided that the quarry is infilled.

3.2 The minimum amount of material will be used and suitable waste types will be used to protect the groundwater and to protect the purity of the stone remaining in the quarry which will enter the food chain. The works will be completed to an appropriate standard.

3.3 The Inspector on appeal considered it essential to protect the Scheduled Monument by infilling to ensure that the land is not left as a void after quarrying. Thus there is a clear planning obligation to undertake these works. The required works are in accordance with 'recovery' as set out in Article 3(15) of the Waste Framework Directive and with Environment Agency guidance and are a Recovery Operation.



Application boundary

Land ownership boundary

Approximate location of Cannington bypass (unsurveyed)

Version	Revision and compilation notes	Date
A	Issued to client	24.10.2016
B	Issued to client	24.10.2016
C	Issued to client	25.10.2016

Client
Castle Quarry Hill Co Ltd

Project
Castle Hill Quarry, Eastern Extension

Site location plan showing proposed extension and ownership boundaries

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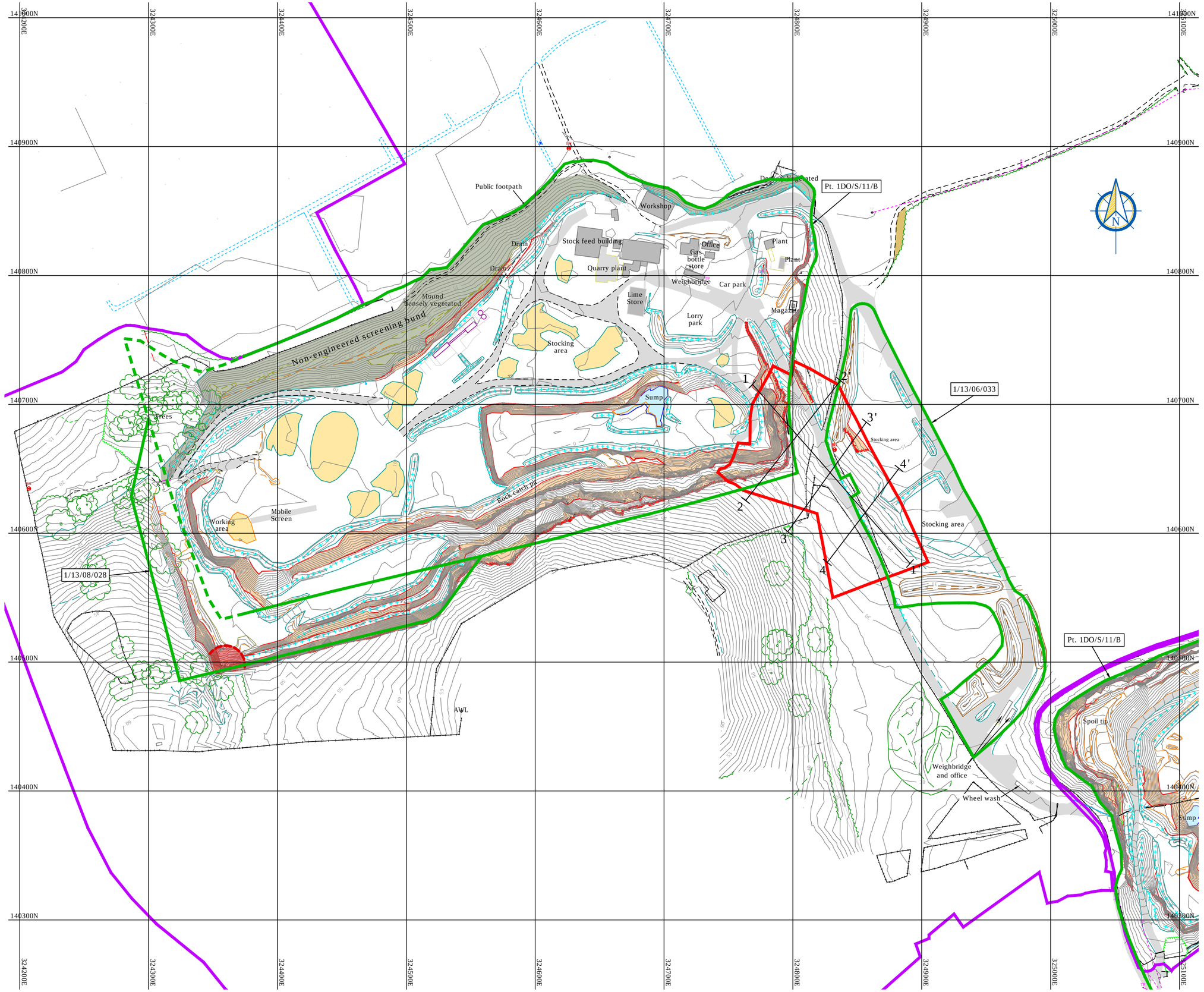
earth & water resources

Date	Drawn	Checked	Scale
25.10.2016	JCB/DJM	AEC	1:20,000 at A4

Drawing Ref	Drawing No	Version
CASHEXT1610	1	C



LEGEND

- Application boundary
- Planning boundary with reference number
- Land ownership boundary
- Crest / Toe of quarry face
- Crest / Toe of batter
- Crest / Toe of rock
- Ground surface contour (mAOD) (10)
- Fence
- Site road/track
- Building
- Overburden mound
- Stockpile
- Water
- 15m standoff area from void
- 1' Line of cross section

NOTES

- Update survey undertaken by GWP Consultants on 22nd September 2016 to OS grid and datum

Version	Revision and compilation notes	Date
B	Issued to client	24.10.2016
C	Issued to client	25.10.2016

Client: Castle Hill Quarry Co Ltd

Project: Castle Hill Quarry, Eastern Extension

Site survey of Castle Hill Quarry (updated 22 September 2016) showing planning boundaries

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Date	Drawn	Checked	Scale
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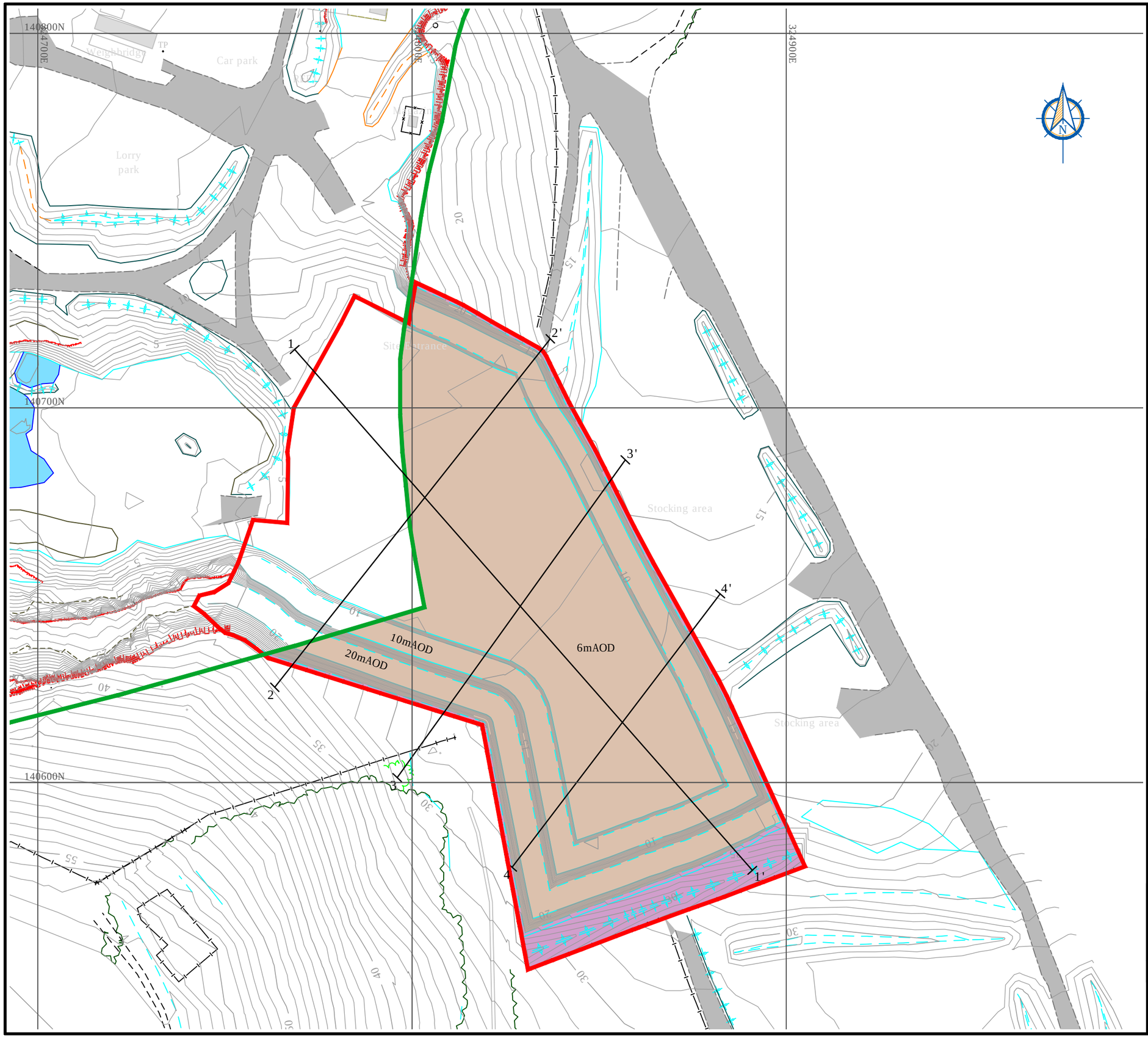
Drawing Ref	Drawing No	Version
CASHEXT1610	2	C



LEGEND

- Application boundary
- 1994 Planning Boundary (IDO/S/11/B)
- Proposed limit of excavation
- Proposed standoff and screening bunds
- Crest / Toe of existing quarry face
- Crest / Toe of bund
- Crest / Toe of batter
- 10 — Ground surface contour (mAOD)
- 1 — Line of cross section

NOTES

- Based on survey of Western and Eastern extension areas undertaken by GWP Consultants 16th, 17th & 18th June 2015 to Ordnance Survey grid and datum

Version	Revision and compilation notes	Date
B	Issued to client	24.10.2016
C	Issued to client	25.10.2016

Client: Castle Hill Quarry Co Ltd

Project: Castle Hill Quarry, Eastern Extension

Eastern extension area

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Date	Drawn	Checked	Scale
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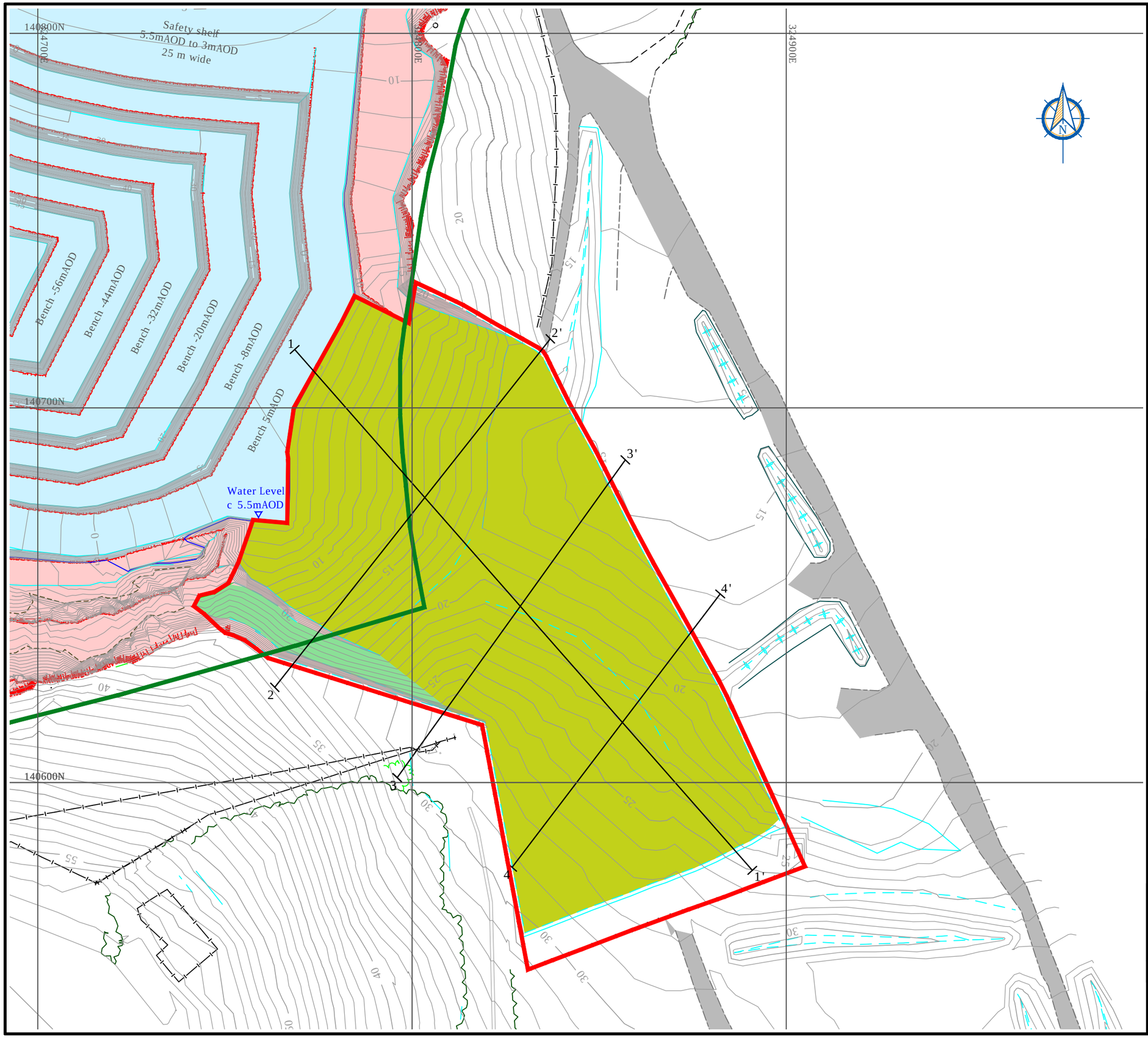
Drawing Ref	Drawing No	Version
CASHEXT1610	3	C



LEGEND

- Application boundary
- 1994 Planning Boundary (IDO/S/11/B)
- Proposed final restoration areas formed using inert fill
- Soil and rock buttress against rockface
- Exposed rock above final groundwater level
- Rock below final groundwater level
- Crest / Toe of existing quarry face
- Crest / Toe of bund
- Crest / Toe of batter
- 10 — Ground surface contour (mAOD)
- 1 — Line of cross section

NOTES

- Based on survey of Western and Eastern extension areas undertaken by GWP Consultants 16th, 17th & 18th June 2015 to Ordnance Survey grid and datum

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B	Issued to client	24.10.2016
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Client
Castle Hill Quarry Co Ltd

Project
Castle Hill Quarry, Eastern Extension

Proposed restoration landform

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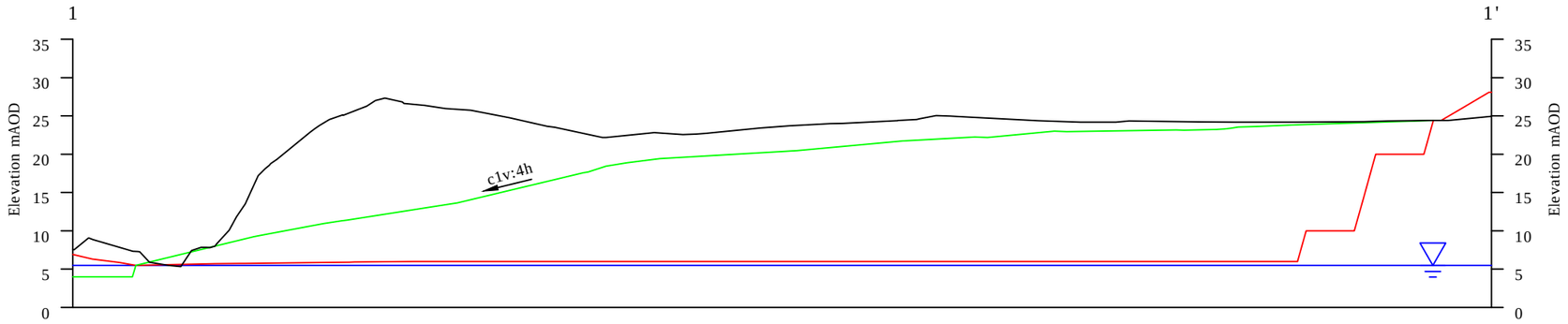
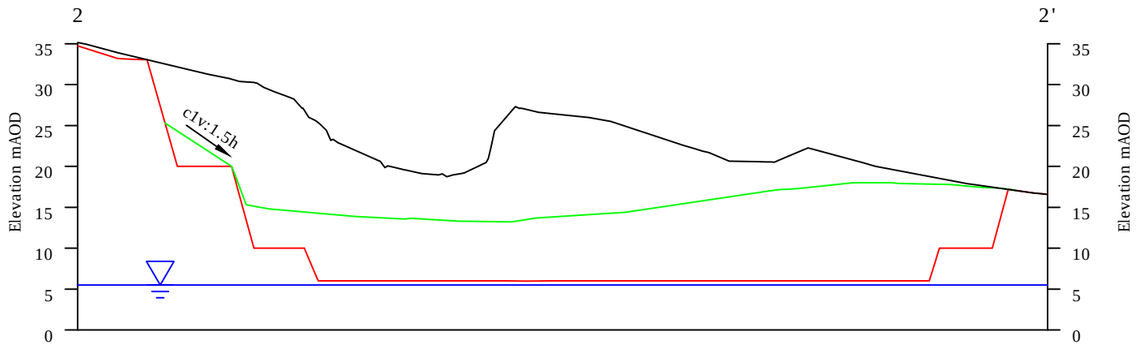
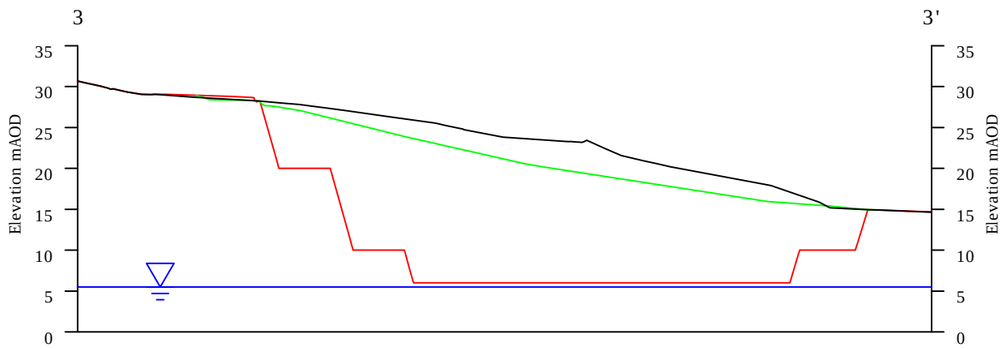
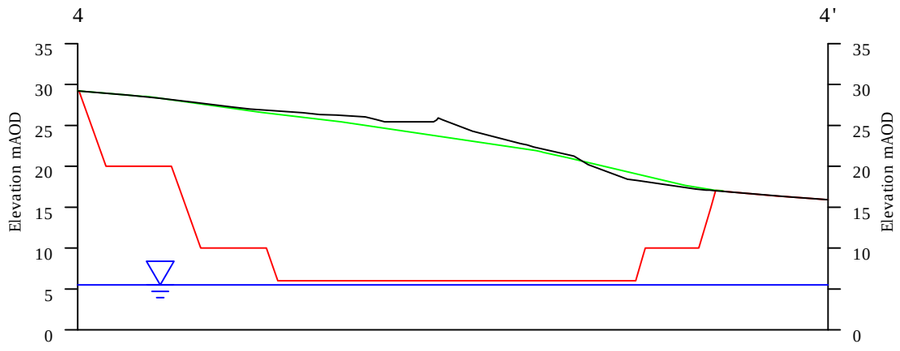
Drawing Ref	Drawing No	Version
CASHEXT1610	4	C









LEGEND

- Existing ground surface
- Proposed excavation profile
- Proposed restoration profile
- Final groundwater level expected to be 5.5mAOD

Version	Revision and compilation notes	Date
B	Issued to client	24.10.2016
C	Issued to client	25.10.2016

Client
Castle Hill Quarry Co Ltd

Project
Castle Hill Quarry, Eastern Extension

Cross sections through proposed Eastern Extension area

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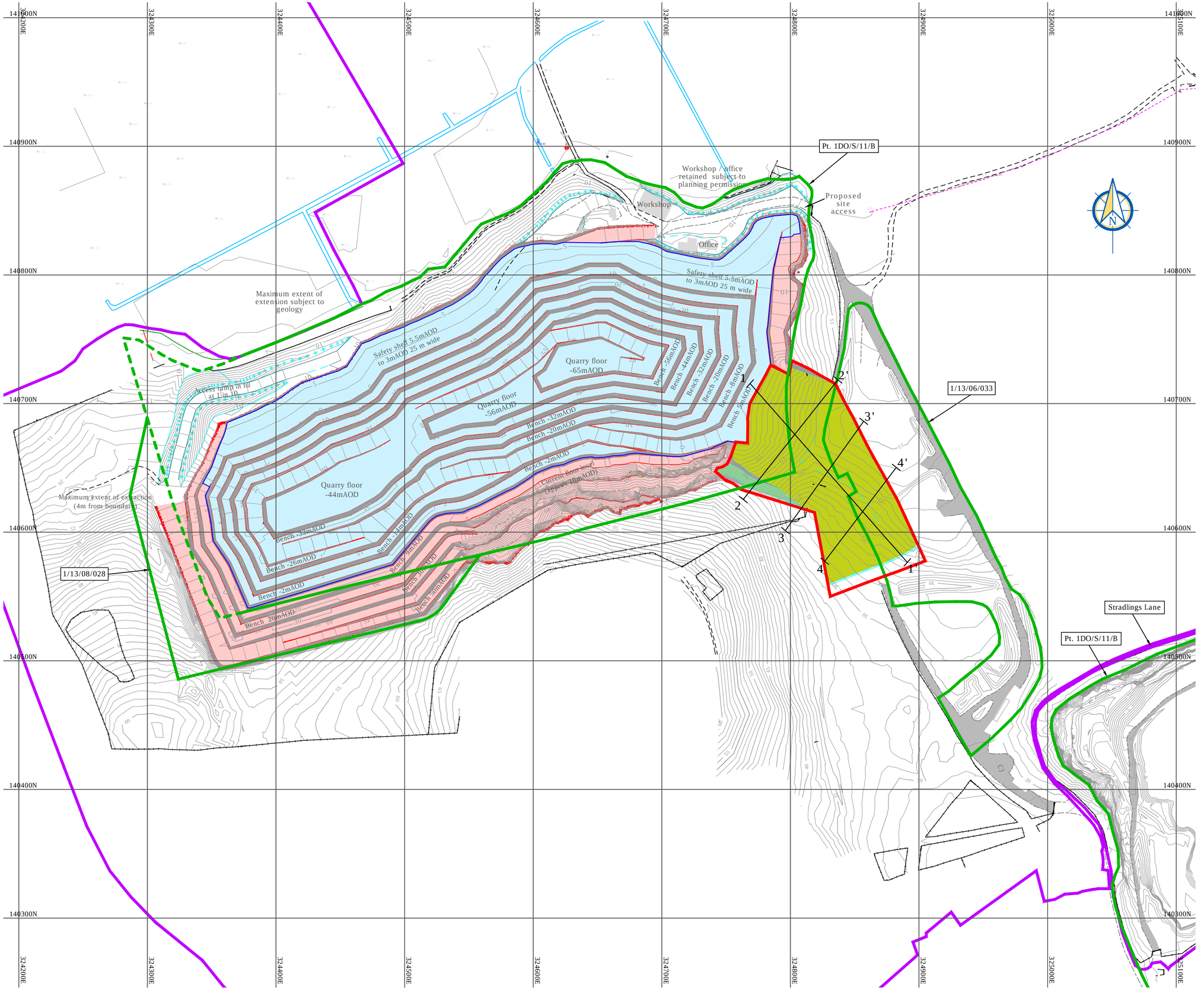
Date	Drawn	Checked	Scale
25.10.2016	JCB/EMB	AEC	1:750 at A3

Drawing Ref	Drawing No	Version
CASHEXT1610	5	C



LEGEND

- Application boundary
- Planning boundary with reference number
- Land ownership boundary
- Crest / Toe of quarry face
- Crest / Toe of batter
- Crest / Toe of rock
- Ground surface contour (mAOD)
- Fence
- Proposed final restoration area formed using inert fill
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- Exposed rock above final groundwater level
- Rock below final groundwater level
- Line of cross section

Version	Revision and compilation notes	Date
B	Issued to client	24.10.2016
C	Issued to client	25.10.2016

Client: Castle Hill Quarry Co Ltd

Project: Castle Hill Quarry, Eastern Extension

Final restoration plan

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Date	Drawn	Checked	Scale
25.10.2016	RM/JCB/EMB	AEC	1:2000 at A2

Drawing Ref	Drawing No	Version
CASHEXT1610	6	C

Workshop and office retained subject to planning permission

Workshop

Office

Proposed new PRoW route

Existing stocking area restored to calcareous grassland

Proposed new PRoW route

Approximate extent of proposed woodland planting. Exact footprint of planting block to be confirmed on site once final extraction operations completed

Gently sloping shelf for safety

Main Quarry void to be left to fill with water to natural final level, estimated c. 5m AOD

Land in this area restored to a c. 1:4 slope down to the proposed final water level and seeded to develop as calcareous grassland. Shallow water's edge to develop as reedbed and/or emergent vegetation zone

Proposed woodland established on slope

Remnant face to remain as landscape feature

Faces and slopes to be left to naturally regenerate

Land in this area restored close to original ground levels and merged into existing stocking area, with all land seeded to develop as calcareous grassland.

Existing PRoW route to remain

Subject to suitable vehicle access, benches to be spread with c. 300mm of restoration material and seeded with an appropriate low maintenance grass mix to be agreed with the LPA . Where vehicle access not viable, benches to be left to naturally regenerate

KEY

- *APPLICATION BOUNDARY*
- *RESTORATION CONTOURS (@ 1m intervals)*
- *EXISTING PUBLIC RIGHT OF WAY ROUTE TO REMAIN*
- *PROPOSED NEW PUBLIC RIGHT OF WAY ROUTE (Refer to Drawing No. CHILL017 for full details of proposed changes to PRoW routes)*
- *EXISTING AMENITY GRASSLAND OR AGRICULTURAL LAND TO REMAIN UNDISTURBED*
- *LAND TO BE RESTORED TO CALCAREOUS GRASSLAND*
- *REMNANT FACES WITH BENCHES DRESSED AND SEEDED (IF ACCESS POSSIBLE) OR LEFT TO NATURALLY REGENERATE*
- *EXISTING WOODLAND/HEDGEROWS*
- *PROPOSED WOODLAND/HEDGEROWS*
- *WATER BODY TO RISE TO ESTIMATED 5.0m AOD*
- *SHALLOW AREAS TO BE POTENTIALLY DEVELOPED AS REEDBEDS/EMERGENT AQUATIC ZONES*
- *BUILDINGS TO BE RETAINED SUBJECT TO PLANNING PERMISSION*

Client

CASTLE HILL QUARRY CO. LTD.

Site: *CASTLE HILL QUARRY*

Project: *PROPOSED EXTENSION*

Drawing Title

MAIN QUARRY AND PROPOSED EXTENSION AREA: COMPOSITE RESTORATION SCHEME

Date: *NOVEMBER 2016*

Drawing No.: *CHILL016*

Scale: *1:1,250 @ A2*

Ref.: *1611_006.012_CHILL016*

Revision: *0*

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From: John Salmon <js@landandmineral.co.uk>
Sent: 13 August 2019 11:45
To: 'Gribben, Anna'
Cc: Carolyn Hysted (ch@landandmineral.co.uk)
Subject: RE: WASTE - Application for Approval of a Waste Recovery Activity. Castle Hill Quarry, Cannington, Somerset

Hi Anne-Marie

Thank you for your email message. It is proposed that the wastes, which could be used in Recovery, would be those which are allowed for in your standard rules waste recovery permit (SR2015 No.39). We may however revise the types of waste during the permit application. In practice, I understand that, apart from any in-situ quarry waste which is predominantly clay and requires no permit, the majority of waste arisings are most likely to be soil and clays coming from naturally occurring construction excavations but other materials included in the waste codes below should not be excluded at this stage.

EWC Code	Description
01 01 02	Wastes from non-metalliferous excavation
01 04 08	Waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	Waste sand and clays
02 04 01	Soil from cleaning and washing beet
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13 14	Waste concrete
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics
17 05 04	Soil and stones
19 12 09	Minerals (for example sand, stones)
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20 02 02	Soil and stones (excluding topsoil and peat)

I trust this is sufficient for your purposes and look forward to the determination of the Waste Recovery Permit application as soon as you are able.

Kind regards

John

John Salmon FRICS MRTPI FIQ
Land & Mineral Management
Roundhouse Cottages, Bridge Street, Frome, Somerset, BA11 1BE
tel 01373 465739 | mobile 07831 823285
www.landandmineral.co.uk

From: Gribben, Anna
[mailto:anna.gribben@environment-agency.gov.uk]
Sent: 24 July 2019 16:30
To: John Salmon <js@landandmineral.co.uk>
Subject: RE: WASTE - Application for Approval of a Waste Recovery Activity. Castle Hill Quarry, Cannington, Somerset

Hi John

Apologies I missed you before I went on leave. I will be back on the 12th August 2019.

I haven't been able to fully complete the assessment of your waste recovery plan. However, I have identified that you have not submitted any waste types in your plan. I have noted that you confirm waste types will be determined as part of the Hydrogeological Risk Assessment. To determine, if your proposal is 'recovery', I need to assess waste types. Please can you submit the following?

1. A list of waste codes that you intend to use with an appropriate EWC code and description. The waste types must be physical, chemically and biologically suitable for the works you are proposing. (Please note that further assessment of the proposed waste types based on the sensitivity of the site location is carried out as part of the permit determination. 'Recovery vs. Disposal' assessment considers what waste types *may* be suitable, not what waste types *will* be deemed suitable following technical assessment)

Regards

Anna

Best regards,

Anna-Marie Gribben

Environment Agency.
National Permitting Officer,
National Permitting Team - RFH Warrington.

☎ **020 30250421 (external)**
☎ **50421 (internal)**
anna.gribben@environment-agency.gov.uk
✉ Environment Agency, Richard Fairclough House, Knutsford Road, Warrington Cheshire, WA4 1HT

My working days are Monday – Wednesday

From: John Salmon [mailto:js@landandmineral.co.uk]
Sent: 24 July 2019 09:58
To: Gribben, Anna <anna.gribben@environment-agency.gov.uk>
Subject: RE: WASTE - Application for Approval of a Waste Recovery Activity. Castle Hill Quarry, Cannington, Somerset

Thank you Anna
I look forward to hearing from you.
Kind regards
John

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From: Gribben, Anna
[mailto:anna.gribben@environment-agency.gov.uk]
Sent: 24 July 2019 07:24
To: John Salmon <js@landandmineral.co.uk>
Subject: RE: WASTE - Application for Approval of a Waste Recovery Activity. Castle Hill Quarry, Cannington, Somerset

Hi John

Just to let you know, I have been allocated your waste recovery plan, to assess.

I am on annual leave for two weeks, after today, so I am going to try and complete this by this afternoon.

Thanks

Anna

Best regards,

Anna-Marie Gribben

Environment Agency.
National Permitting Officer,
National Permitting Team - RFH Warrington.

☎ **020 30250421 (external)**
☎ **50421 (internal)**
anna.gribben@environment-agency.gov.uk
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My working days are Monday – Wednesday

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SAVE PAPER - Please do not print this e-mail unless absolutely necessary

From: John Salmon [mailto:js@landandmineral.co.uk]
Sent: 04 July 2019 16:28
To: PSC Land <PSC@environment-agency.gov.uk>
Subject: WASTE - Application for Approval of a Waste Recovery Activity. Castle Hill Quarry, Cannington, Somerset

Dear Sirs

I attach an Application to confirm a waste recovery activity in the restoration of a quarry at Cannington, Bridgwater Somerset.

Also attached are plans of the development proposals and the planning decision letter.

A cheque for the fee (£1,231) has been sent to you and we are advised that it will be allocated to the Waste Recovery Plan when you receive it.

Would you kindly acknowledge receipt of this application.

Yours faithfully

John Salmon

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Castle Hill Quarry Co Ltd

Castle Hill Quarry, Cannington, Somerset.

Test of Meaningful Financial Gain

Confidential

29th November 2019

Land & Mineral Management

Note

This confidential report was produced by Land & Mineral Management for Castle Hill Quarry Company Limited, specifically to illustrate that the restoration of Castle Hill Quarry's Eastern Extension would be commercially viable utilising non-waste materials for restoration purposes.

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Contact Details:

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1 Introduction

1.1 The recovery operation proposed at Castle Hill Quarry by Castle Hill Quarry Company Ltd (CHQCL) is to reinstate, to the approved restoration topography close to the original ground levels, a small discreet area of mineral bearing land (the quarry's Eastern Extension) which will be worked to remove a valuable primary mineral. The purpose of reinstatement by infilling is to ensure the long term protection of the setting of a Scheduled Monument as deemed to be essential by a Planning Inspector, on advice of Historic England, in a planning appeal. The land will be returned to a combination of woodland, and dry grassland thus enhancing biodiversity.

1.2 In addition to the legal obligation already set out in the Waste Recovery Plan application the Environment Agency has requested that the test of meaningful financial gain is also demonstrated.

1.3 EA Guidance on recovery states:

"Financial gain by using non-waste materials: evidence

You could provide evidence to show that if you carried out the work with non waste you would benefit from a net financial gain. Your waste recovery plan needs to include:

your expected income and any capital gain

all the costs of generating this income and any capital gain

all the costs of carrying out the work with non waste and any ongoing operating costs

This should show that it would be commercially worthwhile to use non waste".

1.4 This document demonstrates that the meaningful financial viability test can be readily met.

2 Meaningful Financial Viability Test

2.1 Site restoration of the Eastern Extension is legally essential. In substitution for the use of directive waste to complete the approved restoration scheme it would be financially viable also to use non-waste materials. It has been determined that the void could be restored using aggregate recycled to WRAP protocol standards.

2.2 To be financially viable, and to provide a meaningful gain, the value of the primary mineral quarried must outweigh the cost of importing non-waste materials to return the void to the required restoration levels. The income to be gained from extracting and selling the primary mineral has been calculated by extrapolating the sales results from the company's detailed accounts for the financial year 2018 – 2019 and applying the figures to the expected production from the Eastern Extension..

2.3 The company sells three main products, Construction Aggregates, Agricultural Lime and Animal Feed. Total annual output has consistently been in the region of 140,000 tonnes.

2.4 The total quantity of primary mineral to be removed from the Eastern Extension to create the void has been calculated by Quarry and Geotechnical Consultants GWP Ltd. They have determined that 385,000 tonnes of stone will be extracted and that 119,000 m^3 will be required to restore to the approved levels.

2.5 Using the same proportions of the three main products to the total tonnage that was extracted in 2018 – 2019, the expected quantity of each main product to be removed and sold from the Eastern Extension has been calculated and the anticipated total sales revenue, which would be achieved over the four year expected working period, is shown in Table 1 below. Note that precise quantities and time scales may change according to the fluctuating markets for the three main products over time.

Table 1 - Anticipated Total Revenue Based on Extrapolated 2018 / 2019 Figures.

Column A	B	C	D	E	F
Product	**Tonnage**	**Percentage of Total**	**Sales Income**	**Av. Price Per Tonne**	**385,000 x C x E**
Aggregate	72,253	52.00%	£798,161	£11.05	£2,212,210
Lime	22,460	16.20%	£545,703	£24.30	£1,515,591
Feed	44,158	31.80%	£1,333,479	£30.20	£3,697,386
	138,871	100.00%			**£7,425,187**

2.6 The sales revenue would be achieved over three to four years but, for the purpose of determining costs, it is assumed that the total tonnage (385,000 tonnes) is removed in 2.75 years extracting at 140,000 tonnes per year. Neither future stone price increases nor Interest which may be earned from sales revenue before it is required to pay for the restoration materials have been taken into account but they would offset any costs increase.

2.7 From the sales revenue, the variable costs of quarrying and delivering to customers are deducted. The variable costs set out in Table 2 below are as recorded in the company's financial records and were incurred during the 2018 – 2019 financial year. Variable costs may rise or fall (although not to any significant degree) but Table 2 below provides the best estimate of quarrying costs to be expected.

Table 2 – Annual Variable Costs in Extracting Primary Mineral from the Eastern Extension

Item	2018 – 2019 Variable Costs (from detailed accounts)
Various Purchases	14,801
Explosives and Drilling	54,774
Mill & Aggregate Supplies	4,536
Haulage	60,112
Fuel Oil	191,311
Motor Expenses	131,526
Gross Quarry Wages	669,654
Other Labour	31,908
Subcontractors	1,699
Heat Light & Power	40,331
Maintenance	174,347
Commissions	34,579
Lime spreading	70,895
Non-motor Fuel & Oils	154,739
Depreciation	382,873
Vehicle Hire	23,207
	£2,041,292

2.8 Annual costs to extract the stone amount to £2,041,292 per annum and when multiplied by the 2.75 operational years, total costs will be £5,613,553. Fixed costs, such as insurance, legal and professional fees, administration and non-executive directors' fees relating to non-quarrying activities have been removed where they are not relevant to the Eastern Extension projected costs as they are incurred in any event.

2.9 On the assumption that non-waste is substituted for waste, the cost of acquiring non-waste, and placing it in the void is calculated below. CHQCL has researched the sources of non-waste which are expected to be available during the course of the restoration.

2.10 Recycled aggregate can be delivered to the quarry from a local recycling company, S Roberts & Son (Bridgwater) Ltd. They advise us that, "*Roberts can source up to 120,000 m^3 of recycled crushed concrete, approximately 40,000 m^3 per annum, to enable you to fulfil your obligation to restore the quarry as a condition of planning permission. To ensure we have the availability we would stockpile the material in advance and make other arrangements to supply the quantities you require*".

2.11 The volume of material required to restore is 119,000 m^3. At 1.5 tonnes per cubic metre 178,500 tonnes is required. It is expected that at least 5% of the void will be filled with quarry waste clay or silt thus reducing void capacity by the same amount. The use of the void for 5% indigenous materials would reduce the requirement for non-waste to 169,575 tonnes (rounded to 170,000 tonnes). Costs are set out in Table 3 below and the overall financial viability is in Table 4.

Table 3 – Restoration Materials Cost

	Recycled Aggregate
Price per Tonne	£6.50
Placement & Spreading	£1.00
Total per Tonne	£7.50
Total Cost (170,000 tonnes)	£1,275,000

Table 4 - Financial Viability Using Recycled Materials

Total Revenue from Sale of Quarried Stone (from Table 1)	**£7,425,187**
Quarry Variable Costs (from Table 2 and paragraph 2.8)	£5,613,553
Cost of Restoration Materials (from Table 3)	£1,275,000
Total Costs	**£6,888,553**
Net Margin	**£536,634**

2.12 It is concluded that, in the unlikely event that no inert waste materials at all could be sourced and the void had to be completed using 95% non-waste and 5% quarry waste, the project would be financially viable. A sufficient rate of return would be generated from the sale of stone from the Eastern Extension to enable the legal obligation to be fulfilled. Meaningful Financial Gain has therefore been demonstrated.