



Supporting Statement
Waddington Fell Quarry
Armstrongs Aggregates Ltd.

Document Reference: 200/19--R1.2 - Supporting\_Statement



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#### Contents

1 – Introduction 1 2 - Site Description 3 7 3 - Operational Details 4 - Planning Policy Review 12 5 - Restoration Scheme 16 6 - Hydrogeological Risk Assessment HRA – 1 7 - Highways Technical Note Highways - 1 8 - Extended Phase 1 Habitat Survey Bowland Ecology -1 9 - Breeding Birds Survey Bowland Ecology -2 E3P - 1 10 - Geotechnical Stability Report

### List of Plans

Plans and Drawings

Plan Title	Plan Reference
Location Plan	200/19 – 1
Site Plan	200/19 – 2
Restoration Scheme A	200/19 – 3A
Restoration Scheme B	200/19 - 3B
Transport Routing Plan	200/19 – 4
Final Excavation Profile	WFQ/OCT20-02
Final Restoration Contours	WFQ/OCT20-03
Cross-Sections	WFQ/OCT20-04
Breeding Birds Survey 1	Breeding Bird Survey (May 2020) Figure 1
Breeding Birds Survey 2	Breeding Bird Survey (June 2020) Figure 1
Phase 1 Habitat Survey Plan	Phase 1 Habitat Survey Figure 1



#### 1.0 Introduction

- 1.1 The Mineral Planning Group Ltd. (MPG) have been commissioned by Armstrongs Aggregates Ltd. (AA) to make a planning application for an enhanced restoration scheme at Waddington Fell Quarry ('The Site'). The revised restoration scheme would utilise tunnel arisings from the nearby sections (Bowland and Marl Hill) of United Utilities Haweswater Aqueduct Resilience Programme (HARP)<sup>1</sup>.
- 1.2 The HARP is a major infrastructure improvement programme, that seeks to replace the tunnelled sections of the Haweswater Aqueduct, which supplies water to businesses and residents in the Lancashire, Cumbria and Greater Manchester areas.
- 1.3 The Site's location and existing site plan are shown in Drawings ref: 200/19 1 and 200/19 2.
- 1.4 The enhanced restoration scheme requires approximately 1,575,000 tonnes of arisings and excavated material from the Bowland and Marl Hill sections of the HARP.
- 1.5 The key aims of the application are:
  - To achieve a net gain in biodiversity at The Site through the provision of a variety of habitats and landforms

<sup>&</sup>lt;sup>1</sup> https://harpconsultation.co.uk/ Note that Waddington Fell Quarry would accept materials from the 'Bowland' and 'Marl Hill' sections of the HARP.



- To assimilate The Site into its surroundings through sympathetic restoration features
- To facilitate the tunnelling works of the HARP



# 2.0 Site Description

- 2.1 The Site is located to the west of the B6478 road, at grid reference: SD716478.
- 2.2 The Site is abutted to the north, west and south by moorland, and to the east by the B6478 road.
- 2.3 The Site is currently an operational sandstone quarry extracting rock from the Pendle Grit Member of the Millstone Grit Group.
- 2.4 Rights of Way
- 2.4.1 There are no public rights of way within The Site.
- 2.5 <u>Hydrology and Hydrogeology</u>
- 2.5.1 The bedrock beneath The Site is classed as a Secondary A Aquifer. However, groundwater is considered to be at some depth beneath the existing workings and has never been encountered at The Site. Further consideration of hydrogeology is included in Section 6 of this document.
- 2.5.2 There are no surface water courses within The Site, except for existing surface water lagoons, some of which would be retained (see Section 5 of this document).
- 2.6 Relevant Planning History
- 2.6.1 The Site has a long planning history and mineral extraction has taken place there



since, at least, the mid 19<sup>th</sup> Century. The following list of planning permissions all relate to The Site:

- B.O.712
  - o Approved: 28/02/1961
  - o "Removal of quarry waste"
- bo.712
  - o Approved: 28/02/1961
  - "Remove quarry waste from Waddington Fell quarries in spoil heap"
- B.O.770
  - Approved: 09/01/1962
  - "Excavate overburden to a maximum depth of 5 feet"
- B.O.1083
  - Approved: 09/02/1968
  - "Quarrying of sandstone"
- 03/75/1132
  - o Approved: 02/03/1976
  - "Quarrying of sandstone for production of graded stone and washed concreting and building sand, and extension of area for disposing of waste materials"
- 03/76/0504
  - o Approved: 22/10/1976
  - "Quarrying of sandstone and extension of waste disposal area (details submitted in respect of condition 4 of 3/75/1132)"
- 03/78/1350
  - o Approved: 05/06/1979
  - o "Extension to office to provide additional messroom facilities and toilet



facilities and location of septic tank"

- 03/80/0148
  - o Approved: 25/07/1980
  - "Alterations to existing primary crushing plant and garage sites"
- 03/82/0008
  - o Approved: 11/05/1983
  - "Extension of existing quarry for extraction of minerals"
- 03/83/0482
  - Approved: 11/09/1984
  - "Extension of existing quarry for extraction of minerals (details submitted in respect of conditions 5, 7 and 11 of 3/82/8)"
- 03/88/0710
  - Approved: 01/03/1989
  - "Extension of existing quarry workings and erection of new stone dressing shed"
- 03/93/0265
  - Approved: 03/06/1993
  - "Erection of weighbridge, office and canteen"
- 03/88/0710/1
  - Approved: 14/06/1993
  - "Extension of existing quarry workings and erection of new stone dressing shed (details submitted in respect of condition 6 of 3/88/710)"
- 03/95/0320
  - Approved: 10/03/1998
  - "Extension of existing quarry workings"
- 03/95/0360/1
  - Approved: 16/04/1998



 "Details submitted in respect of condition 28 of 3/95/360 (scheme and programme for the stripping and use of vegetation)"

• 03/06/0878

Approved: 21/12/2006

"To construct new outfall structure"

• 03/06/0095

o Approved: 08/02/2007

"Variation of condition 2 of permission 03/01/0232, condition 1 of permission 03/95/0320 and condition 2 of permission 03/95/0360 to permit the continuation of quarrying operations and stone sawing until December 2022. Including the construction of a new building to house stone sawing operations with associated internal haul road stocking and storage areas and landscape and environmental improvements to the existing quarry access from Fell Road"

• 03/06/0095/1

Approved: 12/12/2007

"Compliance with condition 28 of permission 03/06/0095 landscaping"

• 03/06/0095/2

Approved: 12/12/2007

"Compliance with conditions 32 and 33 restoration and aftercare"

• 03/13/0309

o Issued (delegated): 14/05/2013

 "Scoping opinion for a proposed quarry extension and enhanced ecologically based restoration"

2.6.2 The extant restoration scheme for The Site was approved under Planning Permission reference 03/06/0095/2.



# 3.0 Operational Details

## 3.1 Restoration

- 3.3.1 The proposed quantity of engineering fill to import (approx. 1,575,000 tonnes) does not meet the total, potential, capacity of The Site (if considering capacity to be infilling to original ground levels). Therefore, only parts of The Site would accept materials from the HARP. The importation of materials for restoration purposes would not occur from any sources other than the HARP.
- 3.3.2 Imported materials from the HARP project would be utilised, in conjunction with site-derived silts / fines (as per the existing restoration scheme), to achieve the final restoration contours.
- 3.3.3 The final restoration scheme is shown in drawings ref: 200/19 Resto-3A and 200/19 Resto-3B. Final contours are shown in drawing ref: WFQ/OCT20-03 and cross-sections are shown on drawing ref: WFQ/OCT20-04.
- 3.3.4 Details of the restoration scheme can be found in Section 5 of this document.

## 3.4 Rate of Working and HGV Movements

3.4.1 The HARP project is scheduled to take approximately 6 years to complete and is planned to commence in 2023. It is proposed to allow for 10 years from the proposed HARP commencement date, i.e. until 2033 to complete the enhanced restoration scheme at Waddington Fell Quarry. This timescale would accommodate other, non-importation, restoration works at such as compacting



of material and landscaping.

- 3.4.3 The applicant is advised that the arrival of materials at The Site would occur on a campaign basis (peaks and troughs) as the nearby sections of the HARP progresses. As Waddington Fell Quarry would only accept materials from elements of the HARP (the Bowland and Marl Hill tunnels), it is not proposed that material would arrive at The Site for the 6-year duration of the entire HARP project. Therefore, the anticipated two-way HGV movements are as follows:
  - For a one-year period when the Bowland and Marl Hill tunnels are being driven simultaneously: Maximum number of HGVs entering the site on any one day =
     171
  - During this period, the average predicted number of HGVs entering the site in any one day = 103
  - For an additional 2-year period when the Bowland tunnel is being driven in isolation<sup>2</sup>: Maximum number of HGVs entering the site on any one day = 96
  - During this period, the average predicted number of HGVs entering the site in any one day = 64
- 3.4.4 It is anticipated that the <u>maximum</u> figures quoted above would only be achieved on <u>2 to 3 days every 3 to 4 weeks</u>.
- 3.5 Hours of Operations
- 3.5.1 The following operational hours are proposed (as already approved):

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<sup>&</sup>lt;sup>2</sup> Once the Marl Hill Tunnel is complete.



06:30 – 18:30 hours Monday to Friday

06:30 - 13:00 hours Saturdays

3.5.2 No operations would be undertaken on Saturday afternoons, Sundays or Bank Holidays, when only maintenance of the plant and equipment would be carried out.

# 3.6 <u>Water Management</u>

- 3.6.1 It is not proposed to alter the surface water drainage regime from that of the existing, approved restoration scheme.
- 3.6.2 The revised restoration scheme retains several ponds at The Site and incorporates water bodies, as per the current approved scheme.

### 3.7 Noise

- 3.7.1 The nearest potentially sensitive receptor to noise from the proposed enhanced restoration scheme is over 1km from the area intended for infilling. Therefore, it is not considered that there would be any unacceptable noise impacts from the proposed operations. Practices currently employed at The Site to reduce noise (eg. white noise reversing alarms) would continue to be utilised throughout the lifetime of the permission.
- 3.7.2 Other potentially sensitive receptors such as wildlife (including any Schedule 1 birds) are not considered likely to be affected by the restoration. The Site is already

an active minerals extraction site, yet is often visited by birds etc. as shown by the breeding bird survey.

3.8 <u>Dust / Air Quality</u>

3.8.1 There are not considered to be any sensitive receptors near to The Site that would be affected by dust or air quality issues. Nevertheless, it is considered that there is the potential for dust to leave The Site's boundaries if no mitigation measures are

implemented.

3.8.2 The primary source of dust would be from HGVs using internal haulage routes. However, additional potential sources of dust are stockpiled materials and the depositing of materials from HGV tippers.

3.8.3 Therefore, the following measures would be implemented to prevent unacceptable levels of dust from leaving the site boundaries:

• Daily visual inspections of potential dust producing activities,

- Wetting down of haul roads, stockpiles or other materials causing dust,
- Site speed limit of 10mph,
- Observations of weather forecasts to pre-emptively wet down areas as above,
- Temporary suspension of operations until a source of dust can be mitigated.

3.8.4 However, it is noted that the proposed activities are considered likely to give rise to lower incidences of dust emissions relative to the current quarrying activities,



which have not caused unacceptable adverse air quality and dust issues.

# 3.9 <u>Landscape</u>

3.9.1 The enhanced restoration scheme is likely to have a neutral to positive impact on the landscape relative to the existing, approved scheme. Whilst in landscape terms the enhanced scheme is not materially different from the existing, approved restoration scheme, it is likely to provide a more naturalistic appearance as opposed to a single, large, waterbody. After restoration, the enhanced scheme would provide a final landform and appearance that is more congruent with the landscape in which it is situated, relative to the existing restoration scheme.



# 4.0 Planning Policy

## 4.1 <u>Introduction</u>

4.1.1 The provision of the Town and Country Planning Act (1990) as amended, indicates a presumption in favour of development proposals which are in accordance with the Development Plan.

# 4.2 <u>The Development Plan</u>

- 4.2.1 The Development Plan for this proposal is a combination of the following adopted documents so far as they are relevant:
  - The National Planning Policy Framework (NPPF)<sup>3</sup> 2018 (as amended)
  - The Lancashire Minerals and Waste Core Strategy (February 2019)
- 4.2.2 The LCC Minerals and Waste Core Strategy is currently under review. However, there is no indication of when the consultation is likely to end and, therefore, when the new policies may be adopted.

#### 4.3 National Policy

4.3.1 The National Planning Policy Framework (NPPF) was adopted in March 2012 with the latest revision in 2019. The NPPF sets out the Government's approach to Planning and Sustainability, and replaces Planning Policy Statements (PPS) and

<sup>&</sup>lt;sup>3</sup> Supplemented by the NPPG.

Planning Policy Guidance (PPG), which previously set out the Government's

National policies on land-use planning.

4.3.2 Chapter 17 (paragraphs 203 - 211) of the NPPF is dedicated to: - 'Facilitating the

sustainable use of minerals'.

4.3.3 Paragraph 204, part h) states (that policies should):

"ensure that worked land is reclaimed at the earliest opportunity, taking account

of aviation safety, and that high quality restoration and aftercare of mineral sites

takes place."

4.3.4 The enhanced restoration scheme would provide for high quality restoration, in

line with the latest guidance and best practices.

4.4 Regional Policy – LCC Minerals and Waste Core Strategy

4.4.1 Policy CS1 of the Core Strategy states:

"Mineral resources with the potential for extraction now or in the future will be

identified as Mineral Safeguarding Areas and protected from permanent

sterilisation by other development."

4.4.2 The entirety of The Site is within the Mineral Safeguarding Area. The proposed

scheme does not prejudice lateral extensions of The Site and does not, therefore,

sterilise mineral resources.

13

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4.4.3 Paragraph 6.7.12 discusses the percentages of waste recovered / used to restore

guarry voids. Whilst the tunnel arisings generated by the Bowland and Marl Hill

sections of the HARP scheme cannot be considered a waste in this instance as

they have a pre-determined end use (biodiversity net gains through guarry

restoration), it is important to note that they may otherwise have been disposed of

as an inert waste with no benefit to the environment. LCC aim to reduce the

amount of waste that goes direct to landfill. The proposed restoration scheme

would assist with this target, by ensuring over 1.5 million tonnes of material is

recovered through an MMP for use in quarry restoration.

4.4.4 Policy CS8 discusses the locations for waste facilities. Whilst the proposals do not

constitute a waste operation, and are therefore not directly governed by this

policy, it is nevertheless important to note that Untied Utilities have specifically

identified Waddington Fell Quarry as the most sustainable location to accept

materials from the excavation process.

4.5 Need

4.5.1 Waddington Fell Quarry's existing restoration scheme was designed on the basis

that only site derived material would be available to produce the final landforms

and habitats. However, the presence of the adjacent Bowland and Marl Hill

sections of the HARP has provided an opportunity to generate a variety of

landforms across the site, improving The Site's contribution to the surrounding

habitats and biodiversity upon restoration.

4.5.2 Furthermore, the need to source an appropriate and sustainable location for the

arisings from the HARP – a vital project to secure the long-term water supply to

14

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residents and businesses in the Cumbria, Lancashire and Greater Manchester areas is another key driver for this scheme.

- 4.5.3 The Site is located within an Area of Outstanding Natural Beauty (AONB). Paragraph 172 of the NPPF states that major development in these areas should not be permitted unless there are exceptional circumstances and the development would be in the public interest. Considerations should be given for "the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;".
- 4.5.4 The proposals seek to facilitate the HARP, which is a project that is clearly in the public interest and has an impact on amenity at a regional scale. Waddington Fell was identified as the most suitable and sustainable location to accept tunnel arisings by United Utilities. The project would create jobs across the northwest, in addition to the retained / additional jobs at Waddington Fell Quarry itself. The need for the (revised) development would therefore constitute exceptional circumstances.



#### 5.0 Restoration Scheme

## 5.1 <u>Introduction</u>

- 5.1.1 The enhanced restoration scheme would utilise tunnel arisings from the nearby Bowland and Marl Hill sections of the Haweswater Aqueduct Resilience Programme (HARP)<sup>4</sup>. The materials would be used to create a varied topographic profile.
- 5.1.2 Additional details regarding the geotechnical aspects of the restoration design can be found in the *E3p* document reference: 14-513-R1.

#### 5.2 Restoration Scheme Features

- 5.2.1 The enhanced restoration scheme can be divided into two primary areas. These are the area that is to receive arisings from the HARP (Area A), and the area that would receive no additional restoration materials from the HARP (Area B), as shown on Drawing ref: 200/19 3A.
- 5.2.2 In Area B, little further restoration would be carried out, as these areas have remained largely 'untouched' for several years (in some areas, several decades) and have successfully naturally regenerated. This approach largely reflects the extant approved restoration scheme for this area.
- 5.2.3 Details of the biodiversity features within Area B are detailed in The Site's ecology

<sup>&</sup>lt;sup>4</sup> <a href="https://harpconsultation.co.uk/">https://harpconsultation.co.uk/</a> Note that Waddington Fell Quarry would accept materials from the 'Bowland' and 'Marl Hill' sections of the HARP.

survey (Bowland Ecology document ref: Habitat Report Waddington Quarry V2).

Several zones within Area B provide existing habitat mosaics, with good ecological

merit, and it is considered that disturbing these zones would not contribute to

generating a net gain in biodiversity, and would therefore be contrary to the aims

of the restoration scheme.

5.2.4 The following paragraphs describe the features that would be created in Area A.

However, some of the features also occur in aspects of Area B and, where

appropriate, this will be highlighted in the text.

5.2.5 Retained Quarry Faces

5.2.5.1 Whilst the infilling of Area A would dictate that parts of the existing guarry faces

would be covered by infill materials, the higher sections of the faces would be

retained in situ. Due to the method of extraction employed at The Site, the faces

would have a natural cliff appearance, and would not constitute expansive planar

features.

5.2.5.2 The only work that would be carried out to the retained faces as part of restoration

would be for health and safety reasons, for example, to remove large or loose

blocks.

5.2.5.3 The retained quarry faces would be beneficial to a number of important species. It

is vital to retain the faces as habitat for important species such as Peregrine Falcon.

Other species such as raven are confirmed at The Site and could also use the faces

for nesting.

17

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200/19 - Waddington Fell Supporting Statement

5.2.5.4 Some (small) faces have also been retained in Area B, and these have successfully

naturally revegetated.

5.2.6 Water Bodies

5.2.6.1 The final topographic profile of Area A would allow water bodies to form. Retained

quarry fines will be spread over the proposed water body areas and lightly

compacted to create a horizon of lower permeability. In addition to being

topographically lower than the island and rocky areas (see below), this would lead

to water being more likely to be retained in these areas.

5.2.6.2 The water bodies would provide habitat for a number of species, both in terms of

flora and fauna. In combination with the island and rocky areas, feeding habitats

would be created for wading birds, as well as sand martins, in addition to birds such

as geese and ducks, both of which were observed during the breeding bird survey.

5.2.7 Islands and Rocky Areas

5.2.7.1 The island and rocky areas would be created through selective tipping and

landscaping of infill materials to create topographic high areas. The slopes into the

water bodies are designed to be approximately 1:4, to allow natural regeneration of

marginal aquatic plants, and provide suitable feeding areas for wading and aquatic

birds.

5.2.7.2 The inherent variety of grain sizes of imported and retained materials would lead to

a variety of different habitats, particularly at the water edges. However, larger

diameter material would be selected, or, retained from the final extraction profile

(sandstone scree etc.) in order to be emplaced upon the island and rocky areas. As

shown in Drawing ref: 200/19 - 3A, this material would be predominantly used in

the southern and northern aspects of Area A.

5.2.7.3 The island areas would create extensive habitats for both flora and fauna. It is

considered that, whilst Sand Martins were not reported in the breeding bird survey

at The Site, the habitat created would be suitable for the species, and may

encourage nesting at The Site. The islands and rocky areas would create habitat

for amphibians, invertebrates, and small vertebrates, as well as for wading and

aquatic birds.

5.3 Natural Regeneration

5.3.1 Evidence from Area B, as well as parts of Area A prior to any infilling, shows that

there is great potential for successful natural regeneration after the infilling and

proposed final topographic profile is achieved.

5.3.2 It is considered that a lithosere succession would successfully commence within

the first 1 to 3 years of the completion of restoration. Pioneer species such as algae

and cyanobacteria will make a foothold within the rocky areas of the restored

quarry, providing nutrients for further species that are likely to arrive in the restored

quarry passively, for example, by wind-blown processes or brought by the

droppings of animals. It is anticipated that, after 3 to 5 years, several species

present in Area B will have become established in Area A, such as heather, bilberry

and mosses.

5.3.3 This type of establishment of plant species, in addition to the topography and water

bodies, would lead to a mosaic of habitats that would enable a wide range of flora and fauna to flourish at The Site. This would not only compliment the already regenerated areas of the quarry, but also introduce new areas for the already

established succession to expand into.

5.4 Summary

5.4.1 The revised restoration scheme can be divided into Area A and Area B. Area A

would accept materials from the HARP and create water bodies with islands and

rocky areas, in addition to retained quarry faces.

5.4.2 Area B would not accept new materials and has already successfully naturally

regenerated. Therefore, little to no additional restoration works would be carried

out in this area.

5.4.3 A natural lithosere succession would allow a mosaic of habitats to form, generating

a net gain in biodiversity.

5.4.4 The retained and proposed features would benefit a variety of flora and fauna,

including important species, some of which are already present on site, such as

peregrine falcons.