Appendix 1: Design and Access Statement

Revised Location for Recycling Operations: Machen Quarry

Design and Access Statement

1.0 Introduction

Planning Policy Wales Technical Advice Note 12: Design (TAN12 :2016) sets out a mandatory requirement for planning applications to be accompanied by a Design and Access Statement (DAS), except in certain limited defined instances. The 2016 version of TAN12 replaces the previous 2014 reversion of TAN 12 and Circular 16/94 which are now cancelled.

Design is defined in PPW as:

"*the relationship between all elements of the natural and built environment. To create sustainable development, design must go beyond aesthetics and include the social, environmental and economic aspects of the development, including its construction, operation and management, and its relationship to its surroundings."*

The Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (as amended) sets out that, as a minimum, the DAS must explain:

- the design principles and concepts that have been applied to the development; and
- how issues relating to access to the development have been dealt with.

Welsh Government, in conjunction with the Design Commission for Wales published guidance on Design and Access Statements in April 2017. This guidance explains the statutory basis of the requirements for DAS, but it is apparent that DAS requirements are very much focused on built development and the design principles and philosophy which underpins such developments. These requirements are not readily translatable into an analysis of the use of temporary mobile plant for recycling operations at quarries, notably the suggestion that DAS should cover:

- *The Brief and Vision*
- *Site and Context Analysis*
- *Interpretation*
- *Design Development*
- *The Proposal*
  - *i. Character*
  - *ii. Access*
  - *iii. Movement*
  - *iv. Environmental Sustainability*
  - *v. Community Safety*
  - *vi. Response to planning policy.*

The guidance does however note that the length and level of detail of a DAS can be varied depending on the type and nature of a development

This DAS has therefore been prepared in the context of that advice, which recognises the nature, scale and type of development proposed.

The development under consideration proposes to amend the location of the existing road planings recycling operation at the Quarry and allow for the recycling of construction and demolition (C&D) waste as well as road planings for the production of recycled aggregates at Machen Quarry, involving the use of a mobile crushing and screening plant, together with reliance on the existing access to the quarry to serve the recycling operation. In these circumstances the opportunities for substantive input into design have been constrained, and similarly there have been no opportunities for design iterations since the processing plant is simply a functional item of equipment.

The DAS therefore focuses primarily on a consideration of the planning policy context of the development, together with a brief overview of the checklist of other factors to be considered as part of a DAS, as listed above.

2.0 Planning Policy Considerations

The principle of sustainable development is an integral part of policies of the Welsh Assembly Government. A key component of the sustainable waste strategy, set out in Technical Advice Note 21: Waste, is a 'waste hierarchy' which seeks to recover and recycle as much waste as possible, and to thereby minimize the disposal of untreated waste. It therefore encourages the introduction of recovery and recycling facilities, and notes that active and disused quarries have the potential to be environmentally acceptable locations for the siting of such facilities (para 3.27).

More specific advice is set out in Minerals Technical Advice Note 1: Aggregates (MTAN1), which sets out a series of principles governing minerals planning in Wales. These include the desire to provide aggregate resources in a sustainable way to meet society's needs for construction materials in line with the following objectives:

> *Maximizing the use of secondary and recycled materials……wherever practicable (principle A); and*
>
> *The desire to "encourage the efficient use of minerals and maximise the potential use of alternative materials as aggregates" (principle E).*

MTAN1 continues by confirming that the Welsh Government "*will take every practicable opportunity to promote recycling*." (para 37). It notes that the "*establishment of a network of recycling centres for construction and demolition waste will enable the materials to be stored, separated and processed to maximise their recovery for beneficial use, in particular for aggregates….recycling facilities should be made available therefore in each unitary authority area and, where they are not already established, development plans should make provision for suitable sites or provide clear guidance on suitable types of location, bringing a degree of certainty to potential developers*." (ref para 150). It continues by confirming that the most acceptable locations for recycling centres are likely to include active quarries (para 152).

MTAN1 established a broad objective to increase the proportion of aggregates produced in Wales from secondary and recycled sources to at least 25% of total aggregates supply within 5 years (para 157).

Planning permissions for recycling operations at Machen Quarry were granted in March 2010, November 2014 and January 2019. The 2019 permission was granted to relocate road

plannings recycling operation to a new location at the lowest level of the mineral workings at Machen Quarry.

In June 2010 the Welsh Government issued their Waste Strategy 'Towards Zero Waste' which similarly encourages the re-use and recycling of construction and demolition waste, with an objective to increase the volume of recycled construction and demolition waste to a minimum of 90% by 2019. The existing road planings recycling operation at Machen plays a role in the fulfilment of the existing recycling levels and the continuation of the operation, along with the recycling of general C&D waste at the proposed new location would continue this important contribution.

Policy set out in the development plan is incorporated within the adopted Caerphilly County Borough Council (CCBC) Local Development Plan (November 2010). The 'Vision Statement' of the Plan sets out a series of key objectives, which include the desire to "encourage waste management based on a hierarchy of reduce, reuse and recovery". This is translated into policy via Waste Management Policy SP9 which confirms that the Council will implement a sustainable, integrated approach to waste management, which minimises the production of waste and maximises the use of unavoidable waste as a resource. Supporting para 1.69 develops this theme by confirming that, in line with the National Waste Strategy, the Council will seek to promote the re-use and recycling of materials.

The recycling of "unavoidable" waste, and the creation of a "resource" from that waste (e.g. recycled aggregate) would be fully consistent with this policy commitment.

Section 38 (6) of the Town & Country Planning Act 1990 (as amended) requires that planning applications should be determined in accordance with the development plan, unless material considerations indicate otherwise. In effect, this introduces a presumption in favour of granting planning permissions for proposals which are in accordance with policies of the development plan. This has been further interpreted in the courts which have established the principle that it is not necessary for a proposal to accord with each and every policy in the development plan, since there will be instances where policies pull in different directions. The requirement is for a proposal to accord with the overall thrust of the development plan, taken as a whole.

In this instance, the key thrust of the development plan, and national planning policy guidance, is to encourage recycling. The proposed development is fully consistent with those policy objectives. The Applicants' consider that the development is in accordance with the development plan, and that it should therefore be entitled to a presumption in favour of planning permission being granted.

3.0 Character

The site comprises the level quarry floor within the main quarry bowl, with partially restored quarry benches to the east and northeast, and remnant quarry faces and benches to the west. It is largely enclosed by the existing quarry and is thus well concealed and comprises a discrete location within the confines of the quarry (ref photographs 4-1 to – 4-4 of the Planning Application Statement). The site area of some 1.79 hectares represents a very modest area in the context of the overall surface area of the quarry which is some 50 hectares in extent.

The layout of the proposed development has been dictated by straightforward operational requirements to provide for activities in both Area A, being for:

- road plantings infeed,
- C&D waste infeed,
- Processed RAP area,

- covered bays for processed material,
- mobile crusher and screens, and
- area for processed C&D aggregate

and Area B being for:

- Sheeting bays,
- Light vehicle road planings infeed,
- Light vehicle C&D waste infeed, and
- recycled aggregate exports, including bagged products.

The development thus proposes a straightforward arrangement of areas for imported road planings on the site, space for a mobile crushing plant, and space for the stockpiling of processed material to the north of the plant in Area A.

The scale and appearance of the development is dictated by the physical nature of the crushing plant. The choice of plant is dictated by availability at the time of the contract hire, but all such plants have the same general characteristics. A typical plant is show in Annex 2 to this Statement. The plant illustrated is a Locotrack LT1213[1] which has a maximum height of some 6m (at the feed hopper), and would be inconspicuously sited against the backdrop of the quarry face on its north western side. Additional landscaping is not deemed to be necessary in the context of the well screened nature of the site.

4.0 Access

As is the case with the existing recycling operations, the relocated development would utilise the existing access to Machen Quarry, which is gained off a short link road to the A468. The link road is some 7m wide, narrowing at the railway bridge immediately north east of the site entrance, beyond which a circa 25m wide apron lies at the entrance to the quarry. All quarry vehicles enter and leave the quarry via this long established route. Access to Areas A would be gained via existing internal haul roads, to an area of the former fixed quarry processing and asphalt plant (now removed), with Area B being located close to the existing quarry entrance/weighbridge. The revised location for the proposed development thus enjoys ease of access into and out of the main quarry with the ability to use other existing infrastructure in terms of the quarry weighbridge, lorry sheeting bays etc.

The site entrance and link road have been proven to operate effectively for the traffic associated with the quarry which, historically has operated at an output of around 700,000 tonnes per annum, of which some 560,000 tonnes per annum has typically been despatched by road, and some 140,000 tonnes per annum by rail. It is estimated that between 35,000 and 43,750 tonnes of the 250,000 annual output from the recycling facility will substitute for primary aggregates sales from the quarry and the Transport Statement accompanying the application concludes that and given the cumulative traffic flows with the proposed development would fall below the levels historically accommodated on the A468 whilst remaining well within the design capacity of the route, it can only be reasonably concluded that the network is of an acceptable standard to accommodate the predicted increase in traffic associated with the proposed development.

[1] See Annex 1

5.0 Movement

Movement to and from the development site has been considered via Section 3.0 above (Access). Internal movements would be associated with the use of a loading shovel to feed material into the crusher loading hopper, and the use of a loading shovel to load processed stock into internal dump trucks or road going vehicles. The road going vehicles would utilise the immediately adjoining internal quarry access road to gain access to the existing quarry weighbridge before exiting the site via the existing site access.

The vast majority of vehicle movements to and from the site would be associated with the delivery of raw materials into the site, and the export of recycled aggregates from the site.

6.0 Environmental Sustainability

The development is fully consistent with the principles of sustainability in waste management, which seek to encourage the recycling and reuse of waste material. As noted in Section 2.0 of this DAS, both national and local planning policy expressly encourage the recycling of waste for the production of aggregates, and the increased role which it should play in the supply of construction material.

7.0 Community Safety

There are separate legal requirements imposed via the Mines and Quarries Act to ensure that the boundaries of a quarry site are secure. The application site lies within the boundaries of Machen Quarry, and thus the Mines and Quarries Act requirements would be applicable to the application site. The site would be signposted from the quarry access road, with clear signs directing personnel to defined areas within the quarry.

8.0 DAS Summary

The aim of the development is to amend the location of the existing road planings recycling operation at the Quarry and also allow for the recycling of construction and demolition (C&D) waste as well as road planings for the production of recycled aggregates in a more discrete and better screened location within the quarry bowl at the existing Machen Quarry, utilising mobile plant and equipment. The nature of the development represents a conventional approach to the proposed activities, and is a sustainable form of development which is actively encouraged by planning policy.

Lokotrack

Lokotrack LT1213

- built around the proven NP series impact crusher
- two feeder options available
- optional vibrating feeder under crusher
- environmentally friendly diesel motor

Unit components

Crusher
Nordberg NP1213M impact crusher
- feed opening 1320 x 900 mm (52 x 35 ½")
- crusher speed 450-600 rpm
- hydraulic drive

Feeder
Feed hopper 6 m³/9 m³ (8 yd³/12 yd³)
- width 2600 mm (8' 6")

Nordberg TK11-42-2V feeder
- length 4200 mm (13' 9")
- width 1100 mm (3' 7")

Engine CAT C13
- power 310 kW (415 hp)

Max capacity up to 400 tph (440 stph)

Dimensions

(Transport, standard unit)

Length:	14 700 mm (48')
Width:	3000 mm (9' 10")
Height:	3400 mm (11' 2")
Weight:	40 000 kg (110 000 lbs)