

# Bridgend Replacement Local Development Plan 2018-2033



## Background Paper 14: Minerals

## Table of Contents

1. Introduction.....	1
2. Background.....	1
3. Planning Policy Context.....	2
4. Key Principle 1: Provide Positively Safeguarding and Working of Mineral Resources....	4
5. Key Principle 2: Protect Environmental and Cultural Characteristics of Places.....	8
6. Key Principle 3: Reduce the Impact of Mineral Extraction and Related Operations.....	9
7. Key Principle 4: Achieving a High Standard of Restoration and Aftercare.....	9
8. Conclusion.....	10

# **BRIGEND REPLACEMENT LOCAL DEVELOPMENT PLAN (LDP) 2018-2033**

## **BACKGROUND PAPER 14: MINERALS**

### **1. Introduction**

- 1.1. This paper is one of a series produced by Bridgend County Borough Council (The Council) as part of the evidence base for the Replacement Local Development Plan (LDP) which covers the period 2018 - 2033. Each paper can be read in isolation or together to gain a wider understanding of how the policies and/or allocations in the LDP have been developed to address issues facing the Council.
- 1.2. The purpose of this paper is to provide further information on the policies relating to minerals contained within the LDP. It will of necessity be an evolving document, subject to update and revision as and when new data becomes available.

### **2. Background**

- 2.1. The Aggregate Safeguarding Map for South East Wales indicates that Bridgend contains significant resources of:
  - Sandstone
  - Carboniferous limestone (the majority having a purity greater than 97%)
  - Sand & Gravel
  - Coal
- 2.2. Category 1 high specification sandstone underlies a large part of the northern section of the County Borough running from a line drawn east to west from Mynydd-y-Gaer in the east to Mynydd Baedon in the west, to Mynydd Bach (Caerau) and Mynydd Llangeinor (Nantymoel) in the north. To the south of that is a thin band of Category 2 quartzite sandstone resource running from Kenfig Hill in the west to Pencoed in the east.
- 2.3. An area of Category One and Category Two carboniferous limestone outcrops to the west of Bridgend (South Cornelly/Newton Down) and along the coastal fringe around Porthcawl.
- 2.4. There are extensive Category One resources of sand and gravel at Kenfig Burrows and at Merthyr Mawr Warren. There are also Category One resources of sand and gravel in the Ogwr Valley and Category Two sand and gravel resources in the Llynfi and Garw Valleys.

- 2.5. The South Wales Coalfield outcrops along a line running from Pyle in the west to Pencoed in the east. The land to the north of that line lies within the coalfield. However, the vast majority of this resource has already been the subject of varying levels of extraction.
- 2.6. Mineral extraction in Bridgend is currently confined to the quarrying of carboniferous limestone at two sites around South Cornelly (Cornelly/Grove and Gaens). Bridgend is an important supplier of carboniferous limestone for general aggregate use as well as high grade 'sinter' (ground limestone) for use in steel manufacture at Port Talbot. There are two inactive/dormant sites at Cefn Cribbwr (sandstone) and Stormy Down (limestone).
- 2.7. There are no sites with planning permission for the extraction of land-won sand and gravel within Bridgend.
- 2.8. There are no landings of marine dredged sand and gravel in the County and no wharfs exist where marine sand and gravel could be landed.
- 2.9. There are currently no coal mining operations being undertaken within Bridgend.
- 2.10. There are no significant sources of secondary aggregate, but there are some opportunities for the reuse of construction, demolition and excavation materials.

### **3. Planning Policy Context**

- 3.1. Strategic Minerals Planning Policy and Guidance is set out in Planning Policy Wales: Edition 11 (PPW11) – February 2021 and Minerals Technical Advice Note 1: Aggregates (MTAN1) – March 2004.
- 3.2. It is recognised in PPW11 (Paragraph 5.14.4) that mineral working is different from other forms of development in that:
  - extraction can only take place where the mineral is found to occur;
  - it is transitional and cannot be regarded as a permanent land use even though operations may occur over a long period of time; and
  - when operations cease land needs to be reclaimed to a high standard and to a beneficial and sustainable after-use so as to avoid dereliction and to bring discernible benefits to communities and/or wildlife.
- 3.3. PPW states that the role of the planning authority in relation to mineral extraction is to balance the fundamental requirement to ensure an adequate supply of minerals with the protection of amenity and the environment (Paragraph 5.14.2). The key principles are to:

- provide positively for the safeguarding and working of mineral resources to meet society's needs now and in the future, encouraging the efficient and appropriate use of high quality materials;
- protect environmental and cultural characteristic of places, including those highly cherished for their intrinsic qualities, such as wildlife, landscapes, ancient woodlands and historic features, and to protect human health and safety and general well-being;
- reduce the impact of mineral extraction and related operations during the period of working by ensuring that impacts on relevant environmental qualities caused by mineral extraction and transportation, for example air quality and soundscape, are within acceptable limits; and
- achieving, without compromise, a high standard of restoration and aftercare so as to avoid dereliction and to bring discernible benefits to communities, heritage and/or wildlife, including beneficial after uses or opportunities for enhancement of biodiversity and the historic environment.

These principles are considered in more detail below.

- 3.4. MTAN1 states that the overarching objective in planning for aggregates provision is to ensure supply is managed in a sustainable way so that the best balance between environmental, economic and social considerations is struck, while making sure the environmental and amenity impacts of any necessary extraction are kept to a level that avoids causing demonstrable harm to interests of acknowledged importance.
- 3.5. PPW states that each local planning authority should ensure that it makes an appropriate contribution to meeting local, regional and UK needs for primary minerals, which reflects the nature and extent of resources in the area and their best and most appropriate use, subject to relevant environmental and other planning considerations. For aggregates this should be done under the aegis of the North and South Wales Regional Aggregates Working Parties, whose role is to provide a regional overview of supply and demand and through the framework provided by the Regional Technical Statements for Aggregates (Paragraph 5.14.10).
- 3.6. The Regional Technical Statement for the North Wales and South Wales Regional Aggregates Working Party – 2<sup>nd</sup> Review (RTS2) was published in September 2020.
- 3.7. The main purpose of the RTS2 is to set out the strategy for the provision of aggregates in the South Wales Region for the period up to 2041 for crushed rock and 2038 for land won sand and gravel. It determines the contribution each LPA should make towards meeting regional needs – referred to as 'apportionment'.

Apportionment is the process of subdividing and assigning the likely requirement for aggregates to be met from a region, to the various resources within a region.

#### **4. Key Principle 1 – Provide Positively for the Safeguarding and Working of Mineral Resources**

##### Landbank Requirements

- 4.1. A landbank is a stock of planning permissions for aggregates and provides for a continuity of production in spite of fluctuations in demand.
- 4.2. PPW states that for the purposes of commercial stability the aggregate industry requires a proven and viable landbank. Therefore, planning authorities should include policies in their development plans for the maintenance throughout the plan period of landbanks for non-energy minerals which are currently in demand. This must be adequate but not excessive. A minimum of 10 years for crushed rock and 7 years for land won sand and gravel should therefore be maintained during the entire plan period of each development plan, except within National Parks and AONB's, unless agreement is reached for other authorities to make a compensating increase in their provision.
- 4.3. There is recognition in PPW that local planning authority boundaries may form a suitable area basis on which to base a landbank policy, but in most areas there is likely to be a need to adopt a regional approach to the assessment.
- 4.4. MTAN1 as amended by the Policy Clarification letter of 28<sup>th</sup> July 2014 states that where landbanks already provide for more than 25 years of aggregate extraction, new allocations in development plans will not be necessary, and LPA's should consider whether there is justification for further extensions to existing sites or new extraction sites as these should not be permitted save in rare and exceptional circumstances.
- 4.5. Landbank figures for the purposes of this background paper are derived from dividing the existing reserves of minerals with planning permission by the average of the last three, or ten years production, whichever is the greater.

##### Crushed Rock Landbank

- 4.6. For confidentiality reasons, Bridgend's production of minerals is combined with the Vale of Glamorgan and Cardiff. The SWRAWP Annual Report 2018 indicates that the average annual crushed rock aggregate sales for the three Authorities combined ranges between 2.47 million tonnes (3-year average) and 1.96 million tonnes (10-year average). On the basis of Bridgend's contribution to these figures the crushed rock aggregate landbank in Bridgend is currently 42 years.



The fact that the 3-year average is well above the 10-year average is indicative of an economic upturn in recent years and monitoring of the landbank will be important to ensure it is not depleted faster than currently predicted.

- 4.7. In the period (2010-2018) approximately 50% of the output of Cornelly Quarry was produced for non-aggregate purposes, almost exclusively for use at Port Talbot Steelworks. At the average annual rate of extraction between 2010 and 2018 there are sufficient non-aggregate reserves at Cornelly to last at least 45 years.
- 4.8. At current extraction rates existing reserves of crushed rock aggregate are therefore adequate to ensure a minimum 10-year supply of throughout the entire period of the LDP. There is also more than a 25-year supply of hard rock aggregate and therefore in line with the guidance contained in MTAN1 there is no requirement for any new specific site allocations, preferred areas or Areas of Search in the LDP.

#### RTS2 Apportionment

- 4.9. The RTS2 states that in the period up to 2041 the County Borough is required to contribute 17.471 million tonnes to production. The existing crushed rock reserves at December 2016 is given as 27.270 million tonnes (which equates to a landbank of 39 years) and therefore the RTS2 concludes that Bridgend is not required to make a crushed rock site allocation in the LDP. However, it states that consideration should be given to whether any of the factors set out in paragraph B84 of RTS2 give rise to any other requirements for resource allocations.
- 4.10. Paragraph B84 states that, 'the recommendations in the RTS2 are based on currently available information regarding reserves, production, proximity and environmental capacity. Therefore, the suggested apportionments and allocations may not take fully into account all factors that may be material to the ensuring an adequate supply of aggregates obtained from appropriately located sources. Such factors may include such things as:
- The technical capability of one type of aggregate to interchange for another;
  - The relative environmental cost of substitution of one type of aggregate by another;
  - The relative environmental effects of changing patterns of supply; and
  - Whether adequate production capacity can be maintained to meet the required level of supply.
- 4.11. Significant sandstone resources cover the majority of the northern sector of the County Borough from Tondy northwards. This resource includes pennant

sandstone of the Upper Coal Measures which has been assessed as having significant development potential for use as high specification aggregate (HSA) because of its natural durability which is valuable for road construction. It is particularly useful for road surfacing as it has high levels of skidding resistance, termed polished stone value (PSV), and also aggregate abrasion value (AAV). The quality of sandstone is, however, variable over this large area. There are also several other high HSA quarries in South Wales which are already coping with demand, which given the current economic recession, it is considered the situation is unlikely to change dramatically within the plan period. Any significant changes would be considered as part of any review of the LDP.

- 4.12. The reserves of aggregate minerals in Bridgend are sufficient to meet the requirements of PPW11, MTAN1 and the Regional Technical Statement for Aggregates in South Wales. However, it has to be acknowledged that the economic climate is depressed at the current time and the situation will have to be monitored so that any significant increases in production (and consequent reductions in the landbank) or changes in demand can be accommodated within the plan period.
- 4.13. The County therefore proposes to take forward a criteria based policy to apply to proposals for mineral working so that it can respond to changes in market conditions and allow new quarry development to appropriate locations in the event that crushed rock reserves and the landbank become depleted at a faster rate than forecast or the crushed rock apportionments are increased in future versions of the RTS or there is a requirement for the release of additional high specification aggregate resources.
- 4.14. The primary aggregate quarries, Cornelly/Grove and Gaens, have planning permissions that extend beyond the plan period of the LDP and at current rates of output the quarries will not be exhausted during the plan period. These quarries currently account for 100% of the production of crushed rock aggregate in Bridgend.

#### Sand and Gravel Landbank

- 4.15. There are no land-based sand and gravel sites with planning permission for extraction so there are no reserves of land won sand and gravel within Bridgend. The average annual output is therefore zero and in strict arithmetical landbank terms with a reserve of zero and output of zero then 7 years supply of nothing can be maintained over the entire plan period. However, continued reliance on marine resources in the long term is a position that is not necessarily be considered to be sustainable and will be kept under review.



- 4.16. There are extensive areas of beach and dune sand in Porthcawl and Merthyr Mawr as shown on the Aggregate safeguarding Map but these areas are heavily constrained by European environmental designations and provide important amenity, landscape, ecology, and tourist value to the area. Any extraction proposals would not therefore be permitted in principle.
- 4.17. It is acknowledged that South Wales is highly dependent on marine dredged resources to supply sand and gravel. Significant quantities of marine dredged sand and gravel are landed at Cardiff, Newport, Swansea and Burry Port with smaller amounts being landed at Pembroke and Port Talbot.
- 4.18. There is a recognition in MTAN1 (paragraph 32) that land-based extraction of sand and gravel is not considered appropriate at the present time, identified resources must be safeguarded in LDP's for potential use by future generations. Any proposals for working of the resource would be considered against a criteria-based policy in the same way as for hard rock.
- 4.19. The RTS2 does not indicate any resource requirements for land won sand and gravel in Bridgend. It recommends that land won sand and gravel resources are identified and where appropriate are safeguarded in the LDP in order to prevent sterilisation of a resource which may be required in the future to maintain supply.

#### Safeguarding

- 4.20. PPW (paragraph 5.14.7) states that it is important that access to mineral resources which society may need, as well as the minerals related infrastructure to deliver this need, is safeguarded in order to prevent sterilisation by other forms of permanent development. Planning authorities are therefore required to consider the long term and the need for preventative action to avoid the creation of problems in the future. Safeguarding does not indicate an acceptance of mineral working, but that the location and quality of the mineral is known and that the environmental constraints associated with extraction, including the potential for extraction of mineral resources prior to undertaking other forms of development, have been considered.
- 4.21. The British Geological Survey produced a Mineral Resource Map of Wales and using that Resource Map as a starting point subsequently produced a Minerals Safeguarding Map of Wales. The intention of the Mineral Safeguarding Maps is that it should enable LPA's to delineate aggregate safeguarding areas in their development plans and adopt suitable policies for managing development in these areas so that unnecessary sterilisation of identified resources does not take place.
- 4.22. The BGS categorised the mineral resources in order of importance. Category One resources are of national importance to Wales (and in some cases the UK).

This category includes those minerals that are specifically referenced in policy as being of limited occurrence and therefore particularly susceptible to sterilisation, and those which are particularly economically important due to their high quality and/or limited occurrence across the UK.

4.23. Category Two resources have been selected as those resources that are considered to be of more than local importance and may have some regional significance but are less important nationally than the Category One resources. Category Three resources are resources that may be important for local supply.

4.24. The Council proposes to safeguard the Category One and Category Two resources as defined in the Minerals Safeguarding Maps of Wales in the LDP to prevent the sterilisation of important mineral resources, except where a specific assessment has concluded that the resource is unlikely to be worked in the future. Such specific assessments have been undertaken where development allocations potentially conflict with mineral safeguarding designations (see Safeguarding Assessment of Sites Report). Resources beneath recognised settlements are also excluded from safeguarding.

4.25. Ideally, areas of development in the LDP should avoid safeguarded areas and conflict should only occur if no alternative location can be found, or if the development area cannot be modified to avoid the safeguarded resource. However, much of the developable land within the settlements has either been developed or committed and there is consequently only limited capacity for new build without causing undue environmental harm. Accordingly, some extension of settlements into safeguarded areas cannot be avoided.

4.26. PPW states that the safeguarding of primary coal resources is not required (paragraph 5.10.17). However, planning authorities, with the exception of National Parks, may wish to safeguard primary coal resources depending on their individual circumstances. Should this be the case, then they would need to include appropriate policies, including those relating to pre-extraction, in their development plans. The Council is not proposing to safeguard coal resources in accordance with PPW.

## **5. Key Principle 2 – Protect Environmental and Cultural Characteristic of Places**

5.1. The LDP will contain robust policies that ensure the protection of these areas. Such areas will include Special Areas of Conservation (SAC), Special Protection Areas (SPA), RAMSAR Sites, Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), sites with known populations of European Protected Species, Special Landscape Areas, the Historic Environment, Surface and Groundwater Resources and the Best and Most Versatile Agricultural Land.

5.2. The extraction of minerals in these areas will only be permitted if it can be demonstrated that the provisions of PPW, MTAN1 and relevant European and National legislation can be met.

## **6. Key Principle 3 – Reduce the Impact of Mineral Extraction and Related Operations**

6.1. LDP's should set out clearly the criteria that will be applied to mineral proposals to ensure that they do not have an unacceptably adverse impact on the environment and the amenity of nearby residents.

6.2. The issues that must be addressed are set out in paragraph 5.14.43 of PPW.

### Buffer Zones

6.3. PPW recognises that there is often conflict between mineral workings and other land uses. Buffer zones should be used to provide areas of protection around permitted and proposed mineral workings where new development that would be sensitive to adverse impact, including residential areas, hospitals and schools should be resisted.

6.4. The objective of the buffer zone is to protect sensitive land uses from the potential impacts of quarrying (dust, noise, traffic and blasting etc) by establishing a separation distance between these uses and quarrying operations. MTAN1 states that a minimum distance of 200m for hard rock quarries and 100m for sand and gravel operations (and sites where blasting is not permitted) should be adopted, and defined in LDP's, unless there are clear and justifiable reasons for reducing the distance. The buffer zone should be defined from the outer edge of the area where extraction and processing applications will take place rather than the site boundary, as there may be land within the site boundary where no operations are taking place.

6.5. The Council will therefore establish buffer zones of 200m around all the hard rock quarries. These buffer zones will be identified on the Proposals Map.

## **7. Key Principle 4 - Achieving A High Standard of Restoration and Aftercare**

7.1. PPW makes it clear that unless new mineral extraction provides satisfactory and suitable restoration, planning permission should be refused.

7.2. Restoration and aftercare should provide the means to at least maintain, and preferably enhance, the long term quality of land and the landscapes taken for

mineral extraction. Reclamation can provide opportunities for creating, or enhancing sites for nature conservation and biodiversity gain.

- 7.3. In view of the long life of the main quarries within the County, it is essential that opportunities for progressive restoration are identified where appropriate and practical. The increased use of progressive restoration can help to reduce the visual impact of mineral activity at any one time, provides a continuity of restoration and greater depth to planting as well as reducing the potential environmental damage left by any failure to restore sites once worked out.
- 7.4. Beneficial after-use for agriculture, forestry, nature conservation or informal recreation does not normally require separate planning permission. Any other after-use may require a separate planning permission.
- 7.5. The LDP will include within its policies a requirement to demonstrate that land used for mineral working can be reclaimed for beneficial after-use and a requirement to provide for progressive restoration where it is practical to do so.

## **8. Conclusion**

- 8.1 Welsh Government's minerals policies are currently set out in PPW and in a series of Minerals Technical Advice Notes. The Revised LDP minerals policies and proposals is set in the context provided by these documents.
- 8.2 The Replacement LDP reflects the approach of the Regional Technical Statement (RTS) 2<sup>nd</sup> Review. The County Borough is required to meet the apportionments set out in the RTS through the LDP process in order to contribute towards meeting the regional demand for aggregates (both hard crushed rock, and sand and gravel). The total requirement is for 17.471 MT of crushed rock over the next 25 years. The County Borough has a surplus of existing permitted crushed rock reserves in the region of 27.27 MT to put towards this requirement. Therefore, the County's landbank figures for crushed rock is notably in excess of the minimum requirements set out in MTAN1. MTAN 1 requires LPAs to maintain a minimum 10 year supply of aggregates (landbank) throughout the Plan period to ensure that national, regional and local demand are met. The limestone quarries within the County Borough contribute approximately 8.7% of the South Wales region's total crushed rock sales for the aggregates market. At present, the total aggregate reserves (landbank) figure is approximately 42 years.
- 8.3 There is no requirement set out in the RTS for sand & gravel. At present, there is currently no land-based sand & gravel extraction within the Cardiff City sub-region, and this has generally been the case for decades. This is due in part to the ready availability of marine dredged sand from both the Severn Estuary and the Bristol Channel, but also reflects the environmental sensitivity of many of the

inland areas which might contain potentially suitable resources. It is recommended that land won sand and gravel resources are identified and where appropriate are safeguarded in the LDP in order to prevent sterilisation of a resource which may be required in the future to maintain supply.

- 8.4 In accordance with the recommendations contained within the RTS 2nd Review, no future provision for land-won primary aggregates, including allocations for future workings have been identified within the Plan.
- 8.5 There is a continuing requirement to safeguard existing quarry sites and to identify appropriate buffer zones around the quarry sites. The Council has therefore established buffer zones of 200m around all the hard rock quarries. These buffer zones can be identified on the Proposals Map.
- 8.6 The Council will use the BGS 2012 minerals safeguarding maps as a basis for safeguarding of the economic mineral resource in the Plan area. However, the previous requirement to include safeguarding of the primary coal resource has now been removed from Welsh planning guidance.