

**FLINTSHIRE COUNTY COUNCIL**

**REPORT TO:** **PLANNING COMMITTEE**

**DATE:** **21<sup>st</sup> JULY 2021**

**REPORT BY:** **CHIEF OFFICER (PLANNING, ENVIRONMENT AND ECONOMY)**

**SUBJECT:** **PHASED EXTRACTION OF SOME 31.13M TONNES OF LIMESTONE FROM WITHIN THE EXISTING PERMITTED AREA AT HENDRE QUARRY AND FROM WITHIN AN EASTERN EXTENSION TO THE QUARRY AS A COMPREHENSIVE EXTENSION AND CONSOLIDATION SCHEME; RETENTION OF THE EXISTING PROCESSING PLANT AND RELATED INFRASTRUCTURE FOR THE DURATION OF THE DEVELOPMENT; RETENTION AND USE OF THE EXISTING ACCESS FOR THE DURATION OF THE DEVELOPMENT; CONSTRUCTION AND LANDSCAPING OF A SCREENING LANDFORM; AND IMPLEMENTATION OF A RESTORATION SCHEME FOR BOTH THE EXISTING QUARRY AND EXTENSION AREA.**

**APPLICATION NUMBER:** **062110**

**APPLICANT:** **TARMAC TRADING LIMITED**

**SITE:** **HENDRE QUARRY, DENBIGH ROAD, HENDRE**

**APPLICATION VALID DATE:** **17<sup>th</sup> NOVEMBER 2020**

**LOCAL MEMBERS:** **COUNCILLOR COLIN LEGG**  
**COUNCILLOR OWEN THOMAS**

**TOWN/COMMUNITY COUNCIL:** **CILCAIN COMMUNITY COUNCIL**  
**HALKYN COMMUNITY COUNCIL**

**REASON FOR COMMITTEE:** **MAJOR EIA DEVELOPMENT ABOVE THE SCHEME OF DELIGATION AND A SECTION 106 IS REQUIRED**

**SITE VISIT:** **NONE REQUESTED**

## **1.00 SUMMARY**

1.01 This is a full application for the phased extraction of some 31.13M tonnes of limestone from within the existing permitted area at Hendre quarry and from within an eastern extension to the quarry as a comprehensive extension and consolidation scheme; retention of the existing processing plant and related infrastructure for the duration of the development; retention and use of the existing access for the duration of the development; construction and landscaping of a screening landform; and implementation of a restoration scheme for both the existing quarry and extension area. The main issues are considered to be:

- The principle of development and suitability of this location
- The Need for aggregate and the need to extend the quarry
- Landscape and Visual Impact Assessment
- Air Quality and Dust
- Noise
- Blasting
- Ecology and Nature Conservation
- Cultural Heritage and Archaeology
- Highways, Traffic, Transportation and Access
- Geology, Geotechnical stability and Soils

The application is recommended for approval subject to the conditions summarised below and a Section 106 agreement relating to blasting limits and nature conservation.

## **2.00 RECOMMENDATION: TO GRANT PLANNING PERMISSION, SUBJECT TO THE FOLLOWING:**

That conditional planning permission be granted subject to the applicant entering into a Section 106 Obligation for:

- Formalisation of the annual payment made to North Wales Wildlife Trust for the ongoing management of Coed Y Felin Nature Reserve. The annual payments will be made for the lifetime of NWWT's lease of the land and will be subject to an annual report by the NWWT being provided showing how the money has been spent.
- Variation of the existing legal agreement which imposes a higher blast limit of 20mm/s ppv for the Gwrachen Farm, a property situated to the north of the quarry which is owned by the applicant.

- 2.01
1. Approved plans
  2. Duration of the permission to 31 December 2056
  3. Time limit for completing the restoration 31 December 2056
  4. Hours of working
  5. Hours of working (asphalt plant)
  6. Control of dust
  7. Dust mitigation
  8. Control of blast vibration
  9. Blast limit
  10. Blast monitoring
  11. Control of Noise during operational hours
  12. Control of Noise for maintenance outside working hours
  13. Control of noise for maintenance during weekend/public holiday daytime hours
  14. Control of noise for temporary operations
  15. Noise monitoring and reporting
  16. Noise monitoring for asphalt plant (Sunday/Bank holidays)
  17. Vehicle cleaning
  18. Withdrawal of permitted development rights
  19. Colour of fixed plant
  20. Lighting on plant
  21. Pollution control and Ground water
  22. Drainage and surface water control
  23. Written Scheme of Archaeological Investigation and Archaeological Watching Brief .
  24. Soil stripping and storage
  25. Storage of top soil
  26. Storage of subsoil and overburden
  27. Management of Perimeter Bunds
  28. Maintenance of Perimeter Woodland
  29. Submission of updated Bat and Bird, and Badger Survey.
  30. Grassland monitoring
  31. Progressive Restoration of final quarry benches
  32. Recording and monitoring of restoration on final quarry benches
  33. Detailed scheme for progressive restoration
  34. Early Cessation
  35. Removal of fixed plant and machinery
  36. Five year Aftercare scheme
  37. Annual aftercare reporting
  38. Implementation of aftercare
  39. Submission of scheme of mitigation for Milwr Tunnel prior to phase 2
  40. Quarry inspections annual report.
  41. Submission of an updated geotechnical/mine stability report prior to Phase 5 or works within 45m of the Milwr Tunnel caverns

### **3.00 CONSULTATIONS**

#### **3.01 Local Members**

##### Cllr Thomas

Requests that the application is determined by the planning committee. The reason given is to ensure the areas of objection can be dealt with.

##### Cllr Legg

No response at the time of writing

#### **Town and Community Councils**

##### Cilcain Community Council

- Quarry wagons exiting the Quarry at the A541 junction and turning left towards Mold are forced to cross over the A541 centre line. Therefore, consideration should be given to the realignment of the quarry exit junction to improve the exit radius
- Loaded wagons leaving the quarry and turning left towards Mold deposit a white limestone-laden water on the carriageway. However, consideration should be given to the sweeping operation to be extended to cover the carriageway and footway as far as the Rhosesmor junction on a daily basis.
- Consideration has recently been given by Flintshire CC to a pedestrian crossing near the Service Station in Rhydymwyn. Cost has been an important factor to delay implementing a pedestrian crossing. Consideration should, therefore, be given to conditioning the quarry to make a contribution towards funding of the pedestrian crossing proposal.
- The speed limit through Rhydymwyn village is 40 mph at present. A recent speed survey undertaken by Flintshire County Council proved that the 40 mph limit is not very effective in controlling vehicle speeds. Conditioning Tarmac to contribute towards the cost of introducing enhanced traffic speed reduction measures either side of the village should be considered. Consideration should also be given to extending the 40 mph limit towards the Tarmac Quarry entrance.
- The section of Nant Road between the quarry exit and the A541 has some significant depressions in the road surface, which hold limestone dust-laden surface water. Nant Road at this location was initially constructed as a narrow country lane.
- The lack of regular maintenance of the roadside hedge from The Oak at Hendre to the Tarmac entrance on the Rhydymwyn side of Hendre is a potential danger to local residents who walk the roadside footway.

- An improvement in the wheel washing facility and procedures at the quarry is urgently required to ensure laden vehicles are dry before they come on to the A541.
- Improvement in the road camber of the quarry road between the wheel wash and Nant Road is required to ensure that the waste water from the wheel wash is no longer being held on the road surface.
- Council Members receive complaints regarding vibration and cracking in buildings as a result of quarry blasting. Consideration should be given to introducing lower blasting intensity limits.

#### Halkyn Community Council

Subject to compliance with relevant policies and planning guidance notes, then no objections are raised.

#### Highways Development Control

The Highways Development Control Manager has considered the proposals and raises no objection on highways grounds.

#### Pollution Control

The Pollution Control Officer has considered the proposals and raises no objection on environmental health grounds.

#### Rights of Way

Public Footpath 24 abuts the site but appears unaffected by the development. The path must be protected and free from interference from the construction.

#### Conservation

The Conservation Officer has considered the proposals and raises no objection on highways grounds.

#### Emergency Planning

The Fire Authority does not have any observations in regard to access for appliances and water supplies. North Wales Police have also been consulted and raise no objection

#### Welsh Government Land Use Planning Unit

Having re-considered this proposal in light of the additional information provided, the Department withdraws its conditional objection the following reasons:

1. The Department no longer considers the proposal to be a TAN6 Annex B2 or B5 matter, therefore, withdraw the BMV policy objection.
2. The Department believes the Authority has the information to be able to determine the application.

### A.O.N.B Joint Advisory Committee

The principal concern is the impact on views from the AONB and how these impacts can be mitigated and the site restored at the earliest possible opportunity. The northern and eastern faces will be particularly prominent, and the committee agrees with the conclusions of the LVIA that the overall impact on the AONB is neutral to moderate adverse. The broad approach and measures adopted to address landscape and visual mitigation are supported, together with the concept restoration plan. The long term Woodland Management Plan is also a welcome initiative, including measures to address the potential loss of woodland cover as a result of Ash dieback. The stated intention to implement a phased restoration of the site is noted, but given that the site will have a 35 year lifespan the Joint Committee does not consider that the current restoration programme is ambitious enough and would recommend that the progressive restoration of the site should start sooner and continue throughout the operational life of the quarry. The committee would also wish to see more of the most prominent upper north and eastern faces/benches restored through seeding and planting rather than natural regeneration.

The Joint Committee would also recommend that an external lighting plan is required for the site to ensure that any lighting is designed to conserve the AONB's dark sky and nocturnal wildlife."

### Clwyd Powys Archaeological Trust

Having considered the interim summary report from Cotswold Archaeology, can confirm that the prehistoric and undated linear and pit features revealed in trenches 1 and 5-8 would need further investigation using a strip/map/excavate methodology over the initial areas highlighted on the sketch trench plan provided by Cotswold Archaeology. This can be successfully achieved by a suitable condition

### Welsh Water/Dwr Cymru

Welsh Water raise concerns regarding the potential impact blasting and vibrations will have on their underground reservoir at Rhosesmor which is approximately 1.4km to the north east of the site. In light of this they are unable to support the application.

### Natural Resources Wales

NRW consider that the proposal is not likely to have a significant effect on a SSSI, SAC, SPA or Ramsar. In addition, the proposed development is not likely to harm or disturb bat or otter breeding sites and resting places at this site, provided the avoidance measures described in the ES are implemented.

On the basis that all proposed works will be located outside the 0.1% AEP event flood outline, they raise no significant concerns in relation to this proposal on flood risk grounds.

We recommend that any grant of planning permission should include conditions relating to the storage of oil's fuels and chemicals, and that the documents listed within their letter are identified within the approved plans and documents on the decision notice

#### North Wales Wildlife Trust

Requests that the future of Coed y Felin as a nature reserve is secured as part of the current proposals to extend the quarry to the East. This should include guaranteed payments for the site's management for at least the duration of the quarry's operation (either by way of guaranteed annual payments or a lump sum) and the transfer of its ownership to the NWWT at some point in time. We would also like to see agreement now on the future of the Hendre Quarry site itself as a haven for wildlife following the cessation of operations (or for some parts of the quarry, before then, if appropriate). These agreements could be made via a Section 106 Agreement as previously or via some other mechanism that provides equivalent long-term guarantees.

#### United Utilities

In accordance with this submitted information, the removal of United Utilities objection in relation to the Milwr Tunnel is subject to the implementation of a range of mitigation measures. We request that these measures are formally captured and expanded upon in a composite document entitled a '*Scheme of Mitigation for Milwr Tunnel*' which should be submitted to the local planning authority and agreed in liaison with UU prior to commencement.

#### Airbus

Hawarden Aerodrome Safeguarding has assessed against the safeguarding criteria as required by DfT/ODPM Circular 1 / 2003: Safeguarding of Aerodromes and the Commission Regulation (EU) No 139/2014 and has identified that the proposed development does not conflict with safeguarding criteria. Accordingly, they have no aerodrome safeguarding objection to the proposal based on the information given

## **4.00 PUBLICITY**

- 4.01 This application was advertised by way of site notice, press notice and neighbour notification letters were dispatched to neighbouring residential properties on 24th November 2021. The application was

re-advertised with neighbour notification letters were being dispatched on 19th May 2021 following the submission of an amended scheme. There were 21 responses received at the time of writing which raises the following concerns

- Quarry wagons exiting the Quarry at the A541 junction and turning left towards Mold are forced to cross over the A541 centre line.
- Loaded wagons leaving the quarry and turning left towards Mold deposit a white limestone-laden water on the carriageway.
- Consideration has recently been given by Flintshire CC to a pedestrian crossing near the Service Station in Rhydymwyn. Consideration should, therefore, be given to conditioning the quarry to make a contribution towards funding of the pedestrian crossing proposal.
- The speed limit through Rhydymwyn village is 40 mph at present, Vehicles including tarmac vehicles travel too fast along the A541
- The section of Nant Road between the quarry exit and the A541 has some significant depressions in the road surface, which hold limestone dust-laden surface water.
- The lack of regular maintenance of the roadside hedge from The Oak at Hendre to the Tarmac entrance on the Rhydymwyn side of Hendre is a potential danger to local residents who walk the roadside footway.
- An improvement in the wheel washing facility and procedures at the quarry is urgently required to ensure laden vehicles are dry before they come on to the A541.
- Improvement in the road camber of the quarry road between the wheel wash and Nant Road is required to ensure that the waste water from the wheel wash is no longer being held on the road surface.
- Blasting vibrations causing cracking in buildings as a result.
- Route used on the B5123 is too narrow.
- Using stone in the construction industry is worsening the impact of climate change.
- Visual impact of the proposal on surround area and vantage points
- Hours of operation need to be reduced,
- Increased noise impact on the visitors to the Fron Farm Caravan Park
- Potential impact on protected species due to loss of agricultural land
- Light pollution caused by the existing development will get worse

## **5.00 SITE HISTORY**

- 5.01 Mineral extraction at Hendre Quarry has taken place since the start of the 20th century, formalised by an initial planning permission granted in 1948. Between 1948 and 1969 a series of planning permissions were granted for extensions to the original quarry. A 'consolidation application' was submitted in 1992 (ref 3/768/92) and subsequently permitted in 1993 which was designed to provide a comprehensive working scheme for the overall quarry covering the areas permitted by the earlier permissions.
- 5.02 Condition 1 of the 1993 permission imposed a requirement that mineral extraction should cease on or before 31st December 2020, based upon assumptions at the time regarding reserves and future rates of output.
- 5.03 An initial 15 year review of the 1993 'consolidation permission' at Hendre Quarry was duly submitted in November 2008. Flintshire County Council determined the application on 22 December 2011 with the issuing of an updated schedule of 37 planning conditions. The updated schedule of conditions imposed the same end date for quarrying operations as set out on the original 1993 permission.
- 5.04 More recently, an application was submitted in August 2018 to extend the end date for the completion of mineral extraction from December 2020 to December 2030, reflecting the extent of reserves remaining to be worked in the existing quarry.

## **6.00 PLANNING POLICIES**

### **6.01 LOCAL PLANNING POLICY**

Flintshire Unitary Development Plan (Adopted September 2011)

Policy STR1 - New Development

Policy STR7 - Natural Environment

Policy STR10 - Resources

Policy GEN1 - General Requirements for Development

Policy GEN3 - Development in the Open Countryside

Policy GEN5 - Environmental Impact Assessment

Policy D1 - Design Quality, Location and Layout

Policy D3 - Landscaping

Policy D4 - Outdoor Lighting

Policy TWH1 - Development Affecting Tress and Woodland

Policy TWH3 - Woodland Planting and Management

Policy L1 - Landscape Character

Policy L2 - Areas of Outstanding Natural Beauty

Policy WB1 - Species Protection

Policy WB5 - Undesignated Wildlife Habitats

Policy WB6 - Enhancement of Nature Conservation Interests

Policy HE7 - Other Sites of Lesser Archaeological Significance

Policy AC13 - Access and Traffic Impact

Policy EM7 - Bad Neighbour Industry

Policy MIN1 - Guiding Minerals Development  
Policy MIN2 - Minerals Development  
Policy MIN3 - Controlling Minerals Operations  
Policy MIN4 - Restoration and Aftercare  
Policy EWP12 - Pollution  
Policy EWP13 - Nuisance  
Policy EWP16 - Water Resources

## 6.02 **GOVERNMENT POLICY/GUIDANCE**

Government Policy / Guidance

Planning Policy Wales (Edition 10)

Technical Advice Note 5 – Nature Conservation and Planning  
Technical Advice Note 11 – Noise  
Technical Advice Note 18 – Transport  
Mineral Technical Advice Note 1 (MTAN 1): Aggregates (2004)  
Minerals Planning Guidance Note 11: The Control of Noise at Surface Mineral Workings (1993)  
Minerals Planning Guidance Note 14: Review of mineral planning Permissions (1995)

Other material considerations

Regional Technical Statement First Review

Regional Technical Statement Second Review

## 7.00 **PLANNING APPRAISAL**

Introduction

7.01 The details of the proposed development will be outlined below, along with a description of the site and location, site constraints and the issues that will be assessed within the main planning appraisal.

Details of the proposed development

7.02 In summary, the proposed development comprises:

- I. An eastern extension of Hendre Quarry;
- II. The establishment of a screening landform along the eastern and southern sides of the eastern extension area;
- III. The progressive placement of quarry waste material into a profiled 'western tip', following the removal of the current 'western tip' to expose remaining reserves in the western area;
- IV. The creation of a temporary northern quarry tip predominantly using material excavated from a central fault zone;
- V. The progressive development of the quarry into the eastern extension area, with quarry waste material to be placed in a new profiled western quarry tip;

- VI. The removal of the southern area of the central quarry tip as a final phase, with the material to be relocated to a profiled eastern quarry landform, allowing access to the remaining reserves at depth in the central area of the quarry; and
- VII. An updated concept restoration strategy for the overall site area, including the eastern extension area.

#### Site Description and Location

- 7.03 Hendre Quarry is an established limestone quarry situated 5 km northwest of Mold and north of the A541 Mold to Denbigh Road, which follows the wooded valley of the Afon Alun (River Alyn). The village of Hendre is located on either side of the A541, approximately 100 metres to the southwest of the quarry. Rhydymwyn village, also located on the A541, is to the southeast of the quarry at a distance of 1.5 km. The village of Rhosesmor is located 2 km to the east of the quarry. The quarry sits in the foothills of the Halkyn Mountain range, which lies to the north.
- 7.04 The quarry lies on the flanks of a deep valley in the “Hendre Gorge” and works into the hillside in a rural setting, with the small settlement of Hendre located to the south west, and isolated properties, a caravan park and farms surround the Site. The Site is visible from viewpoints to the south and southwest of the quarry, including the Clwydian Range and Dee Valley Area of Outstanding Natural Beauty.
- 7.05 A minor, unclassified road runs around the southern, western and northern perimeter of the existing quarry. Screening mounds with well-established trees are located between this road and the existing operational quarry area. The surrounding land use is predominantly pastoral, with cattle and sheep grazing in fields bounded by hedgerows and fences. On higher ground to the north, these fields give way to open moorland grazed by sheep. There are substantial areas of woodland in valleys to the south, west and east.
- 7.06 The extension area is some 5.2ha’s located to the east of the existing quarry and currently pastoral for the grazing of sheep and cattle. There are a number of hedgerows and trees within the extension area, separating the area into a number of usable fields.

#### Principle of Development and suitability of the location

- 7.07 Minerals Technical Advice Note 1: Aggregates (MTAN1) recognises that in dealing with applications for new mineral extraction, the planned system is best placed in determining the most suitable locations and that future extraction should only take place in the most environmentally acceptable locations.

- 7.08 The Site is located in the open countryside in the adopted UDP and is identified as an 'existing mineral site' on the UDP Proposals maps' as 'MIN1-8'. The adopted development plan remains the UDP, and this contains a suite of policies in respect of Minerals. Policy MIN1 is notable in that it identifies that where there is a clear and demonstrable need for primary materials, preference will be given to a) the deepening of existing mineral workings and b) the lateral extension of existing mineral workings. This reflects the fact that minerals can only be reworked where they are found and that an extension to an existing site is likely to have less environmental and economic challenges than the development of a new site. Proposals need to be robustly assessed, and policy MIN2 and MIN3 set out the assessment criteria.
- 7.09 The Council has consulted on a Deposit LDP which was approved by Council with examination on the soundness of the plan taking place earlier this year. The LDP identifies a need for hard rock minerals over the Plan period in accordance with Regional Technical Statement 1st Review (RTS1) and shortly before the Plan was consulted upon, Regional Technical Statement 2nd Review (RTS2) was issued which identifies an increased need for minerals. The Deposit LDP allocates by virtue of EN25.1 an extension to the Hendre Quarry. Full weight cannot be attached to the LDP until it has been through examination and is adopted. Welsh Government provides advice on matters of prematurity in para 7.5 of the Development Plans Manual, which states 'Where an LDP is in preparation, questions of prematurity may arise. Refusing planning permission on grounds of prematurity will not usually be justified except in cases where a development proposal goes to the heart of a plan and is individually or cumulatively so significant, that to grant planning permission would be to pre-determine decisions about the scale, location or phasing of new development which ought to be properly to be taken in the LDP context'..
- 7.10 It is not considered that the proposal goes to the heart of the Plan and is not considered to be in broad terms, individually or cumulatively so significant that to grant planning permission would pre-determine the outcome of the LDP.

Need for aggregate and the need to extend the quarry

- 7.11 The Regional Technical Statement 2nd Review (RTS2) sets out the required apportionment of crushed rock and sand & gravel for each of the North Wales Local Planning Authority areas for the period 2019 – 2024.
- 7.20 Flintshire is required to provide at least 36 mt of crushed rock. The deposit Flintshire LDP was drafted using RTS1 figures. The crushed rock allocations proposed in emerging Policy EN25 of the Flintshire's deposit draft LDP amounted to 24 mt that would be

derived from extensions from two existing quarries; Cemex's 'Pant y Pwll Dŵr' Quarry and the Site subject to this application.

- 7.21 Following the amendment to the quarry design, it was confirmed that the overall quarry development would provide a reserve of some 31.13m tonnes. This was made up of:
- 11.26 m tonnes of accessible permitted reserves of Loggerheads Limestone within the existing quarry area;
  - 13.176 m tonnes of Loggerheads Limestone which would be released by the eastern extension development, of which some 11.19m tonnes of reserves lies within the existing permitted area but which is inaccessible, and a net additional reserve of 2.43m tonnes within the new extension area;
  - 6.69 m tonnes of 'Top Rock' of which it has been assumed that up to 50% may be marketable, say 3.3m tonnes, but where it would clearly be in Tarmac's commercial interest to market as much of that material as possible (and ideally all of it);
- 7.22 If the entire reserve of 'Top Rock' is included, then the overall reserve would be 31.13m tonnes. On that basis, the development would yield additional reserves of 19.866m tonnes.
- 7.23 The proposed allocation for the extension at Hendre Quarry presented in EN25.1 of the deposit Flintshire LDP is for 11 mt. However, the final quarry design proposes to yield an additional 8.866 mt. Therefore, this extension at Hendre Quarry would contribute significantly to the County's land bank and apportionment figure. Should planning permission be granted, the apportionment shortfall for Flintshire would be reduced to just 3.062 mt.
- 7.24 With regards to extensions of existing minerals workings, as is proposed in this application, PPW states that these are often more generally acceptable than new greenfield sites. Policy MIN1 of the adopted Flintshire Unitary Development Plan states that proposals for the winning, working, and processing of minerals will be assessed against the need for mineral workings and the ability of existing sites to meet demand. It also states that where there is a clear and demonstrable need for primary materials, preference will be given to the lateral extension of mineral workings. There is a demonstrable need for additional crushed rock reserves to be realised in the region as set out in the RTS for North Wales. Furthermore, this application is for an extension of existing workings which would be considered more favourable than new sites. This is because the impact of extending an existing quarry being less than that of opening a new quarry, and maximises the sustainable use of the infrastructure and investment already established at an existing

site. As such, it is considered that the proposal accords with the provisions within PPW, MTAN1, the RTS2 and Policy MIN1 of the adopted Flintshire Unitary Development Plan.

### Landscape and Visual Impact Assessment

- 7.25 A landscape and visual impact assessment of the proposal has been undertaken, which identifies sensitive landscapes and views. The main existing development elements which resulting in landscape and visual effects are the creation of tall exposed rock faces and development (up to ~ 80m in height from the current quarry base), blasting, the movement of rock within the quarry, the fixed and mobile plants, processed rock stockpiles and the creation of waste rock tips. The proposed Eastern Extension will only involve the addition of one new element into the landscape, the placement of soils and overburden, which will be stripped to expose rock to create an Eastern Screening Landform along the eastern boundary of the Site. The landform will be approximately 750m in length and vary in height with localised landform /topography between 3 to 7m. It will be progressively formed, grass seeded, and tree and shrub planted. The landform is to be created as a mitigation measure to both screen potential views of the Site from receptors located on higher ground to the east and also to permanently store soils material. The landform will help establish an enclosed woodland corridor around the whole of the Site, both visually enclosing it and also establishing a large area of new wildlife habitat/corridor.
- 7.26 Other mitigation measures include the retention of the existing tree and shrub planting blocks around the western, northern and southern peripheries of the Site, progressive quarry restoration which will involve part reprocessing and movement of previously placed material to create final landform and the battering of slopes which can be seeded / planted to 'green up' internal areas whilst establishing new habitats for wildlife, along with the production and implementation of a long term Woodland Management Plan (WMP) to help ensure the retention of vegetation structure both around the borders of the Site and also internally. This WMP includes measures to identify and manage the potential effects of Ash dieback which has the potential to result in an amount of visual exposure of the existing query if not addressed.
- 7.27 In respect of landscape character, the Site is located adjacent to the Clwydian Range and Dee Valley AONB. Due to a combination of distance from the Site ~1.3km to ~5km, elevation mainly down onto the Site, and the screening of the Site by both landform and vegetation structure, it is considered that the effect of the proposed development will only result in a Very Slight Adverse Significance of effect on these character areas, which is not significant. This includes potential receptor views from Moel y Gaer.

- 7.28 PPW (paragraph 14.3.3) includes minerals planning policy which deals with mineral development adjacent or close to a National Park or AONB. With regards to extensions of existing quarries, PPW states that the extent to which a proposal would achieve an enhancement to the local landscape and provide for nature conservation and biodiversity should be considered. Development adjacent to or close to an AONB that might affect the setting of these areas should be assessed carefully to determine whether the environmental and amenity impact is acceptable or not, or whether suitable, satisfactory conditions can be imposed to mitigate the impact.
- 7.29 The Joint AONB Partnership Committee notes that, although just outside the AONB, The northern and eastern faces will be particularly prominent, and the committee agrees with the conclusions of the LVIA that the overall impact on the AONB is neutral to moderate adverse. However, the quarry has been in place for many years, and the proposed extension is modest in area and timescale and is relatively small in the context of the existing consented operation. The additional impact on the AONB is therefore considered to be limited and relatively modest in extent.
- 7.30 The final restoration scheme is in keeping with the currently approved restoration scheme. Having regard to the scale of the development, the proposed scheme of working, progressive restoration, visibility into the Site, duration of the operations and the characteristics of the surrounding landscape, the potential impacts are considered to be acceptable. It is considered that the proposal complies with the provisions of Policies MIN2, MIN4, L1 and L2 of the adopted Flintshire Unitary Development Plan.

#### Ecology and Nature Conservation

- 7.31 Chapter 7 of Environmental Statement covers the Ecological Surveys undertaken, many of which have been ongoing for a number of years. The latest surveys were undertaken in January 2020 and included an extended Phase 1 survey (primarily habitats), a preliminary bat roost survey and a badger survey of the proposed quarry extension.
- 7.32 The majority of the proposed extension is agriculturally improved grassland, species poor, sheep grazed or silage fields dominated by ryegrass. Mitigation for the loss of the trees and hedgerows will be in the early establishment of a substantial block of native woodland on the eastern boundary. The details of the planting proposals need to be conditioned to ensure that they adequately mitigate for the loss of hedgerows (and plantations). The details of the planting proposals need to be conditioned to ensure that they adequately mitigate for the loss of hedgerows (and plantations).

- 7.33 A proportion of the Hedgerow will be translocated, which has been successful elsewhere in Wales and are a good way of retaining soils and associated woodland flora which can spread into the planted woodland. Details of where it will be translocated to, to make best use of the historic hedgerow and the methodology should be included within the landscape condition.
- 7.34 The mature and semi mature trees were assessed in for their bat roosting potential but no suitable features were observed. It is considered that an updated assessment in relation to both bat and badger activity to should be conditioned prior to the commencement of phase 2 of the development.
- 7.35 The Restoration concept plan to encourage a mixture of calcareous grassland and scrub/woodland habitats with natural regeneration of cliff faces and benches is in line with that agreed for existing permissions. In the short term, Tarmac agreement to formalise funding to the North Wales Wildlife Trust for the long term management of Coed Y Felin Nature Reserve. As such, it is considered that the proposal is in compliance with the provisions set out in MTAN1 and Policies GEN1, MIN1, MIN4, and WB1, WB5 and WB6 of the adopted Flintshire Unitary Development Plan.

#### Blasting

- 7.36 Concerns have been raised regarding in relation to the 'heavy quarry blasting' reported to cause disturbance to local residents, be taken into consideration when considering the application. A number of letters of received against the extension raised concerns in relation to the damage and stress on their property, which they feel is as a result of blasting at the quarry.
- 7.37 National Planning Policy for aggregates is set out in MTAN 1 and recommends a blast limit of 6mm/s ppv An assessment of predicted blast-induced vibration levels has been made to the nearest vibration-sensitive residential receptors to the proposed extension area. The assessment has shown that the magnitude level of 6.0mm/s ppv at 95% confidence can be achieved by suitable blast design
- 7.38 The extant consent is subject to a Section 106 Legal Agreement which imposes a higher blast limit of 20mm/s ppv for the Gwrachen Farm, a property situated to the north of the quarry which is owned by the applicant. Should it be resolved to grant planning permission this must be subject to supplementary Section 106 Agreement to attach the agreement currently in place to the permission arising from this application.
- 7.39 Should planning permission be granted, this limit of 6mm/s ppv would continue to be imposed. Therefore, the current conditional

limit of 6mm/s ppv proposed is in line with recommendations set at a national level.

- 7.40 MTAN1 draws upon advice set out in British Standard 7385 Part 2, 1993 Evaluation and Measurement for Vibration in Buildings entitled "Guide to Damage Levels from Ground Borne Vibration in Buildings". The guidance sets out vibration limits to preclude the onset of damage to the types of structures encountered around quarries, including residential properties. It recognises that there is a major difference between the relatively low levels of vibration that are perceptible to people, and the far greater levels at which the onset of damage is possible. The guidance sets out the lowest vibration levels above which damage has been credibly demonstrated. Cosmetic damage, or hairline cracks in plaster or mortar joints, should not occur at vibration levels lower than 20mm/s ppv at a frequency of 15Hz and lower than 50mm/s ppv at 40Hz and above. This is significantly higher compared to the 6mm/s ppv limit which is set at Hendre Quarry.
- 7.41 To put the blasting data into perspective with by comparing this with everyday events which produce vibration; measurements taken at 1m from someone walking on a wooden floor gives a max ppv of 2.3mm/s ppv, a door slamming measured at 1m away on wooden floors gives a ppv of 5.3mm/s ppv and a foot stamp on a wooden floor measured at 1m away gives a ppv of 52.7mm/s and when measured at 6m away it diminishes to 5.6mm/s ppv.
- 7.42 The Tarmac continually seeks to minimise blast vibration and air overpressure through blast design, and there is no evidence to prove that a continued ppv levels of 6mm/s can cause damage to properties. In the interests of local amenity, the quarry company try to blast at 12.45 pm on a given day (Monday to Friday), but precise timing can be delayed by operational issues and weather conditions. Tarmac also offer to send a notification email to local residents, providing advanced notice of any planning blasting. The effects of blasting can vary over time and location due to the unpredictable nature of naturally occurring rock and ground faults. The existing blasting limit condition includes a 95% blasting compliance limit which provides a tolerance to allow for these unknown variables. When blasting in a new area of on a new working bench, sometimes the vibration levels will exceed the 6mm/s ppv limit and it may take a series of refinements to the blast design over a number of blasts to eventually keep the blasts below the recommended limit. This is the approach which is taken at all hard rock quarries. All blasts are monitored by the quarry operator and blasting contractor, and the site has been regularly monitored by officers of the Council. This would continue to be the case.
- 7.43 Concerns have been raised by Welsh Water in relation to Rhosesmor underground reservoir, which is located 1.3Km from the

perimeter of the proposed extension. Give the distance, the blast induced vibration from the quarry would be virtually indiscernible because the reduction in the ground movement reduces in an inverse square proportion with distance, and it is largely air overpressure which is detected at distance. Both the predicted ground vibration and air overpressure would not be capable of causing any damage to the reservoir structure

7.44 The effect of blasting at the quarry felt by local residents is from the blast causing ground vibration and what is known as air overpressure. Whilst all blasting operations undertaken by the quarry would be designed to minimise air overpressure, so far as is reasonably practicable, there are a number of factors outside of the control of the quarry which mean that predicting air overpressure levels are very difficult. As air overpressure is transmitted through the atmosphere, weather conditions such as wind speed and direction, cloud cover and humidity will all affect the intensity of the impact. Due to this unpredictability, planning conditions to control air overpressure are not considered to be enforceable. However, the results from monitoring undertaken by the quarry demonstrates that air overpressure at sensitive receptors (excluding the Gwrachen Farm) has been an average of 114 dB and over the past 6 months up to 120 dB, indicating that air overpressure from blasting at the quarry is unlikely to cause complaint in accordance with the suggested 120 dB outlined in British Standard 6472 "Guide to evaluation of human exposure to vibration in buildings". Air overpressure can cause physical damage to properties at high level, this is typically at levels between 140 dB and 150 dB which is well above what is experienced at properties as a result of blasting at Hendre Quarry.

7.45 As such, it is considered that the proposal is in compliance with the provisions set out in MTAN1 and Policies GEN1, EWP6, MIN2, MIN3, EWP12 and EWP13 of the adopted Flintshire Unitary Development Plan.

#### Noise

7.46 Noise assessments have been carried out by an independent noise consultant to consider noise levels at the closest noise sensitive receptors, and to evaluate the proposal in terms of the potential impact during its operation and final restoration. The noise assessments have been considered against national planning policy guidance set out in MTAN1: Aggregates, TAN11: Noise, and the relevant British Standards. The assessment shows that the development could proceed in accordance with the noise limits which already impose on the existing planning permission. In addition a Noise Monitoring Scheme will be implemented in order to ensure that the Site is being operated within the conditioned noise limits.

- 7.47 In summary, noise levels associated with operations, final operations and a short term period of soil stripping in the extension area are predicted to be below acceptable daytime limits at the closest noise sensitive properties. Whilst it is not anticipated that noise levels associated with the proposal are predicted to exceed the recommended noise limits, best practice mitigation measures would be employed on Site to reduce noise levels as far as possible.
- 7.48 The noise assessment demonstrates that noise from activities associated with the application would be within acceptable limits and the Pollution Control officer has no objections to this proposal subject to conditions in relation to noise mitigation which would be comparable to existing site mitigation controls already in place for the quarry. This would include the imposition of planning conditions controlling noise with regards to limits, mitigation measures and hours of operation. As such, it is considered that the proposal is in compliance with the provisions set out in MTAN1 and Policies GEN1, EWP6, MIN2, MIN3, EWP12 and EWP13 of the adopted Flintshire Unitary Development Plan.

#### Air Quality and Dust

- 7.49 The operations involved in the extraction and processing of crushed rock, and the subsequent site restoration have the potential to generate dust emissions. A detailed dust and air quality assessment of existing and proposed operations has been undertaken by an independent consultant to support the application.
- 7.50 Should planning permission be granted, existing dust mitigation measures would continue to be employed on Site, to ensure that dust emissions are minimised. These include the enforcement of a speed limit for mobile plant and haulage vehicles, the use of dust suppression via water sprays, maintenance of plant and machinery on Site, the use of dust collecting equipment on drilling rigs, sheeting of vehicles exporting sand and importing restoration materials, the use of a wheel wash, the use of a road sweeper, maintenance and housekeeping of haul road surfaces, regular visual inspections, temporary cessation of dust generating operations in extreme windy weather conditions.
- 7.51 The submitted air quality assessment has considered the potential impacts and resulting effects of dust and suspended particulate matter arising from the operations on nearby human health and ecological receptors. The assessment considered the nature of the Site activities, distance and orientation to the identified receptors and the prevailing wind direction, and the proposed in-design and management mitigation measures, as outlined above. The report

concluded that the overall significance of the proposed development with regards to air quality effects is not significant.

- 7.52 The County Council's Pollution Control and NRW have not objected to the proposal subject to the imposition of planning conditions ensuring the proposed dust mitigation measures are implemented as proposed, so that adequate steps are taken to prevent dust causing a nuisance beyond the site boundary. As such, subject to conditions to ensure that dust is minimised and controlled, it is considered that the proposal is in compliance with the provisions set out in MTAN1 and Policies GEN1, MIN2, MIN3, EWP8 and EWP12 of the adopted Flintshire Unitary Development Plan.

#### Geology, Geotechnical stability and Soils

- 7.53 As part of the design process undertaken for the proposal, a geotechnical assessment was carried out to ensure safe and stable slopes within the Site during the working and restoration phases of the proposal. The quarry site will have to comply with the Quarries and Mines Regulations. The geotechnical work and slope stability analysis has been undertaken during the design of the working phases at the Site, and confirms that the proposal is acceptable in this regard. The analysis concluded that the quarry excavations should be considered stable.
- 7.54 Concerns have been raised regarding the effect of the development on the adjacent Milwr Tunnel and Rhosesmor underground reservoir. The Milwr Tunnel is a 16km long former mine drainage tunnel that runs from the coast at Bagillt to Loggerheads. The tunnel passes approximately 300m to the east of the current extent of the quarry. Several historic limestone mine workings or caverns have been driven off the tunnel. The original development scheme would have resulted in quarrying encroaching to within 17m of the roof of the closest caverns. The development has subsequently been amended to provide a 30m vertical stand-off is required.
- 7.55 In addition to the amended scheme, Tarmac has suggested undertaking a weekly inspection of the quarry void as part of the statutory face inspections. The weekly inspection will provide additional focus to any new areas of faulting or open fissures that could affect the hydrogeological regime on-site. Should the weekly inspection identify any areas of concern, further inspection would be undertaken to consider whether further mitigation is required. An annual report will be required by condition to summarise the weekly inspections and any mitigation works carried out.
- 7.56 The application has considered the protection of soils and a method statement has been provided with the submission, alongside plans showing the location of soils storage stockpiles which would not

exceed a height of 3 metres. Where possible and practical, soils would be stripped and directly placed for progressive restoration. Soils protection conditions would be included in any permission. The proposal therefore is in accordance with Policies MIN2 and EWP15 of the adopted Flintshire Unitary Development Plan.

### Flood Risk

- 7.57 The majority of the Site lies in Zone A, with a small section in the south lying within Zone C2 as defined by the Development Advice Map. A Flood Consequences Assessment (FCA) has been submitted which confirms that the section of the Site within the floodplain will not be developed and will remain in its existing state. Natural Resources Wales have been consulted in relation to flood risk, and on the basis that all proposed works will be located outside the 0.1% AEP event flood outline, raise no objection to the proposal.

### Highways, Traffic, Transportation and Access

- 7.58 Highways Development Management does not object to the application. There would appear to be no changes or proposed changes to the operation of the quarry since the 2011 review of the mineral permission and 2018 extension of time, and no operational concerns have been raised.
- 7.59 A number of community consultation responses have suggested that any planning permission should include conditions to alleviate their highways concerns. The comments regarding the junction of the unclassified road (which leads to the Quarry access road) with the A541 are noted.
- 7.60 Given the fact that the junction is currently performing adequately, and in the context of historic activity at the junction, it would be unreasonable to require the Applicant to undertake junction improvements. Furthermore, it is considered that junction improvements are not considered to be necessary.
- 7.61 Output of the quarry has declined in recent years compared to the output in the 1990's. Furthermore, larger payload vehicles have the effect of decreasing the vehicle movements associated with the quarry considerably. The application is not proposing to increase the output so vehicle movements are anticipated to remain the same.
- 7.62 Concerns have also been raised in relation to the condition of the roads. Condition 17 of the extant planning permission requires vehicle cleansing on exiting the Site, and sheeting of vehicles to ensure that no vehicle shall enter the public highway in a condition which is liable to cause deposits of mud, debris or deleterious materials on the public highway. Should planning permission be granted, this condition would be imposed.

- 7.63 Tarmac undertake, on a voluntary basis, measures to clean the public highway along the A451 to Rhydymwyn, generally as far as the entrance to the Antelope Industrial Estate located approximately 1 km from the access road. This distance is deemed to be sufficient to address any problems associated with detritus from quarry vehicles being deposited on the highway (noting also the internal site measures associated with the use of wheel cleaning equipment and the surfacing of the lengthy internal quarry roads). Continuing the road cleaning as far as the Rhosesmor junction (1.5km from the quarry access road) is also undertaken by Tarmac. In the event that any particular/extreme issues require more regular cleaning, then Tarmac would agree to continue the road sweeping to that position on a more regular and have more recently increased the frequency of cleaning. This will condition to be monitored with further measures discussed and agreed through the Quarry Liaison Committee.
- 7.64 As such, it is considered that the proposal is in compliance with the provisions set out in MTAN1 and Policies GEN1, MIN1, MIN2 and AC13 of the adopted Flintshire Unitary Development Plan.

#### Cultural Heritage and Archaeology

- 7.65 The application is supported by archaeological evaluation of the proposed exemption area. A total of 9 trenches were excavated across four separate fields. In summary, the identified archaeological remains, being broadly consistent with those anticipated from the geophysical survey, are not of such significance to warrant preservation in situ. Also, there are no designated heritage assets that would be adversely affected by the proposal. The submission of a written scheme of investigation will be secured by condition prior to the commencement of any works to the extension area. This would be followed during the initial topsoil and subsoil stripping to identify any sub-surface archaeology which may be present to allow for subsequent archaeological recording.
- 7.66 Should planning permission be granted, a condition would be imposed requiring the operations to be carried out in accordance with the Written Scheme of Archaeological Investigation and Archaeological Watching Brief.
- 7.67 As such, it is considered that the proposal would accord with Policies HE7 and HE8 of the adopted Flintshire Unitary Development Plan. 7.77 Due to the topography of the Site, distance and screening, no features of historic importance in the surrounding area would experience a significant adverse effect as a result of the proposal and therefore accords with Policies MIN2, HE1, HE2, HE5, HE6, HE7 and HE8 of the adopted Flintshire Unitary Development Plan.

## Hydrology and Hydrogeology

- 7.68 An assessment of the likely impacts of the proposal on the water environment in and around the Site has been undertaken. The mineral deposit will be extracted from the Carboniferous Limestone which is a Principal Aquifer.
- 7.69 The quarry lies above the water table with no dewatering. The surface water at the Application Site currently runs off to the quarry void sump before freely draining into the ground and making its way to the Milwr Tunnel a via Hendre flat workings, stopes of the Coed Hendre Vein and a branch of the Halkyn Tunnel. The water is ultimately discharged into Dee Estuary at Bagillt approximately 8 km north of the Application Site. The Dolfechlas Brook is abstracted by Tarmac for wheel washing and dust suppression purposes immediately south of the Site and there is no water discharge into nearby surface watercourses.
- 7.70 Potential impacts to the aquifer, nearby abstractions, surface water bodies, surface and groundwater quality, and nearby sensitive sites have been assessed for the operational and restoration phases of the development. Due to the lack of dewatering, very few potential impacts have been identified. During the operational phase, the only potential impacts are related to water quality and have been assessed as having a negligible to major degree of impact which can be managed by standard good practice. Lastly, there is a negligible risk to groundwater in the post-restoration phase.
- 7.71 Pollution prevention measures are in place at Site to prevent contamination of surface water and ground water from accidental fuel spills or leaks within the quarry are minimised. These would continue to be employed on Site to prevent contamination of the water environment.
- 7.72 The hydrological and hydrogeological impact assessment concluded that the proposal would not have a significant adverse effect on the capacity, flow and quality of ground water or surface water. Natural Resources Wales do not object to the proposal in terms of impact on ground water. It is considered that the proposal would accord with policies MIN3 and EWP 16 of the Flintshire Unitary Development Plan.

## Restoration

- 7.73 The progressive restoration proposals for the Site would return the Site to meadow grassland with areas of substantial woodland and

tree planting, scrub vegetation, and natural regeneration of some of the rock benches/ faces.

- 7.74 Following the completion of the restoration of the Site, there would be a five year aftercare period to ensure that the Site is adequately maintained and managed after quarrying activities have ceased. A condition would be imposed to require the submission of a scheme to ensure that the Site is managed and maintained appropriately for a period of five years. Annual aftercare meetings would take place to ensure that the Site is being managed in accordance with the approved scheme.
- 7.75 Once restoration and planting has been completed, there would be no net loss of habitat due to the proposed restoration and planting. The restoration proposals would create new habitats and enhance existing habitats across the Site. The proposal would result in a net gain of woodland, grassland and wetland habitats above the currently approved restoration scheme.
- 7.76 Should planning permission be granted, a condition would be imposed to ensure that the proposed planting scheme is implemented as approved, with flexibility to allow for changes in species should it be required.
- 7.77 The proposed restoration scheme is predominantly in keeping with the current approved restoration scheme. Given the net gain of woodland across the Site, and an appropriate planting plan is proposed, it is considered that the proposal accords with the provisions of Policies D3, TWH1, TWH3 and MIN4 of the adopted Flintshire Unitary Development Plan.

## **8.00 CONCLUSION**

- 8.01 The proposal involves a lateral extension to the east of the existing Hendre Quarry, working in six phases with progressive restoration for nature conservation purposes until 2055. This would present an extension of time to current permitted extraction by 24 years as the extant permission allows for extraction until 2031.
- 8.02 The quarry has been in place for many years and the proposed extension is modest in area, and is relatively small in the context of the existing consented operation. The additional impact on the AONB is therefore limited and relatively modest in extent.
- 8.03 The RTS2 identifies shortfall crushed rock reserves in Flintshire to meet anticipated need in North Wales. This provides justification for the current proposals which will assist in meeting this need.

- 8.04 There is a demonstrable need for aggregate in the region and this proposal would provide crushed rock as required by the RTS2 for North Wales and contribute towards Flintshire's apportionment. It is considered more favourable to extend existing sites as opposed to opening new sites as there is existing infrastructure in place to support further mineral extraction.
- 8.05 In considering this application the Council has taken into account all the environmental information and matters that are material to the determination of this application, as set out in the Application, Supporting Statement, Environmental Statement, amended plans and technical appendices. The environmental statement has considered and assessed the impacts of the proposed extension to the quarry in terms of landscape and visual amenity of the proposal and potential impacts on the adjacent AONB, impacts on ecology and nature conservation and adjacent designated sites/protected species, noise, air quality, traffic, transportation and highways, hydrology and hydrogeology of the proposed development and concludes that the proposal would retain some existing significant effects associated with the existing Site which would be reduced and considered no longer significant as the progressive restoration of the Site is undertaken. There are no significant residual effects predicted as a result of the proposal.
- 8.06 In determining this application, the Council has had regard to the Policies of the Development Plan, and regional and national policy, legislation and guidance. Subject to the imposition of conditions as listed above, there is no sustainable planning reason why planning permission should be refused. Accordingly, it is recommended that planning permission should be granted subject to conditions

8.01 Other Considerations

The Council has had due regard to its duty under Section 17 of the Crime and Disorder Act 1998 and considered that there would be no significant or unacceptable increase in crime and disorder as a result of the recommended decision.

The Council has acted in accordance with the Human Rights Act 1998 including Article 8 of the Convention and in a manner which is necessary in a democratic society in furtherance of the legitimate aims of the Act and the Convention.

The Council has had due regard to its public sector equality duty under the Equality Act 2010.

The Council has had due regard to its duty under Section 3 of the Wellbeing of Future Generations (Wales) Act 2015 and considered that there would be no significant or unacceptable impact upon the

achievement of wellbeing objectives as a result of the recommended decision.

**LIST OF BACKGROUND DOCUMENTS**

Planning Application & Supporting Documents

National & Local Planning Policy

Responses to Consultation

Responses to Publicity

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