

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Continuation of industrial land uses at former
Seiont Brickworks, Caernarfon
Environmental Statement Part A

Seiont Ltd

December 2023

Revisions Control Page

Date	Summary of Changes Made	Changes Made By (Name)
07.12.2023	Issue for PAC consultation	Stephen Blunt

DRAFT

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Continuation of industrial land uses at former Seiont Brickworks, Caernarfon – Environmental Statement Part A

1 Introduction

1.1 Background and Screening

- 1.1.1 The site of the former Seiont brickworks factory is currently used as a temporary compound in connection with the Caernarfon to Bontnewydd bypass construction project, under two Planning Permissions, reference C17/0011/19/MW and C17/0107/19/LL. This area contains offices, mobile concrete batching facilities, heavy plant workshop facilities, materials processing and storage areas and associated car parking.
- 1.1.2 Bypass construction works are nearing completion, and the site owner wishes to continue certain operations at the site on a permanent basis. In advance of a further planning application, the applicant sought a formal EIA Screening Opinion from the Mineral Planning Authority, Gwynedd Council and submitted document 2021.058_05 Request for EIA screening. For reference, that document is appended as Appendix A. It described the proposed development (ie the continued temporary use of the site), referred to the relevant EIA Regulations and gave an initial appraisal of the potential environmental effects.
- 1.1.3 The Council’s response reference C22/0314/19/SC dated 19/05/2022 forms Appendix B. The content is reproduced here:

Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 - Regulation 5 Screening Opinion

New vehicular access and alterations to Ffordd Waunfawr, internal access and temporary use of land for storage, retention of concrete batching plant and recycling and export of finished materials/products – Seiont Quarry, Caernarfon

Referring to your request dated the for a formal screening opinion under the under the Environmental Impact Assessment regulations for the development described above.

Under Regulation 5 and using the assessment criteria set out in Schedule 2 & 3 of the Regulations, it is concluded that the likely impact of the development on the environment **will** require the submission of an Environmental Statement. This screening opinion will be placed upon the Planning Register at the Authority’s Office.

I would advise that a request for Scoping Opinion to establish the contents of the Environmental Statement is submitted prior to applying for consent.

- 1.1.4 The applicant has made a separate application¹ under the Developments of National Significance process. The separate project consists of a 20 MWe gas fired short-term operating reserve (STOR) plant (sometimes referred to as a ‘Peaking plant’) comprising ten natural gas-fueled engines and associated infrastructure. This development will be regulated by Natural Resources Wales (NRW) under the Environmental Permitting (England and Wales) Regulations as amended. The plant will use gas from the existing mains supply that previously fed the brickworks, and will feed electricity into the Grid at an on-site connection. STOR plants function to provide rapid response and balance demand,

¹ (To be submitted Jan 2024) Application ref: available to view at www.xxxxxxxx

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particularly when wind and solar outputs are low. In this way, they contribute to the wider adoption of non-fossil fuel electricity generation.

- 1.1.5 The STOR plant comes beneath the 0.5ha threshold for energy industry developments which would fall to be considered as Schedule 2 development under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017. No EIA is therefore required for that project.
- 1.1.6 When the proposed concrete batching and materials recycling application is submitted for determination it will be accompanied by this ES. To capture and assess any ‘cumulative effects’ which could arise from the presence of both developments, this ES has treated the STOR plant as an addition to the current baseline. The possibility of cumulative effects is described within this Environmental Statement, in section 13 (within Part B).

1.2 Scoping report

- 1.2.1 In view of the Screening Opinion, the applicant submitted a Scoping Report, and sought the formal Scoping Opinion of the MPA. The Scoping Report put forward justified proposals for the coverage and level of detail that would be provided in a full Environmental Statement. It made reference to conditions set out in the two existing planning permissions, as an indication of controls which could be applied to a new permission in order to ensure that the proposed activities were carried out without unacceptable effects. The Scoping Report forms Appendix C.

1.3 Response to the Scoping Report

- 1.3.1 The MPA consulted a number of internal departments and external bodies as part of its consideration of the Scoping Report, and provided a formal response by letter dated 15/11/2022. This letter forms Appendix D. These responses have been taken into account in preparing this Environmental Statement as shown in the following section 1.4.

1.4 Agreed scope of the Environmental Statement

- 1.4.1 Table 1 shows the topic chapters which were proposed in the Scoping Report, and how they are covered within this Environmental Statement after taking account of consultation responses. Part A of this ES describes the proposed development, its site and setting, the alternatives considered and the approach to environmental assessment that has been adopted. Part B consists of topic chapters for each technical topic that has been included in the scope. Where appropriate, the technical chapters are supported by further detailed reports as appendices. Each topic chapter sets out a description of the current baseline, supported by desk and field study as appropriate, and an assessment of the likely effects of the development as proposed.

Table 1 Environmental Statement topics

CHAPTER OR TOPIC	IN / OUT*	NOTES	PART
Project description	IN	MPA advise that ES should include all impacts, including those from preparatory works covered by extant planning permissions	A
Site and its setting	IN		A
Consideration of alternatives	IN	Under Regulation 17 and Schedule 4 of the 2017 Regulations any reasonable alternatives studied	A

		by the applicant should be presented in the ES, and environmental effects which inform the choices made should be reported	
Environmental Assessment process and structure	IN	MPA advise that ES should set out assessment methods used, distinguish ‘significant’ and ‘non-significant’ effects, and state where professional judgement has been used. Topic chapters to report departures from standard methods, any data limitations, key assumptions and difficulties encountered in establishing baseline environment or environmental effects	A
Air quality	OUT	Although it is proposed to prolong current operations, MPA agree with proposed scoping out, since dust control processes for the haul route, crushing/screening/blending and concrete batching operated to date have been shown to be effective. Plan will show layout and distance to nearest residents. The number of vehicle movements is below the threshold for ‘Scoping in’ stated in DMRB LA105.	
Cultural Heritage	IN	CADW considers the potential effects on sites within 3km radius should be a material planning consideration and should be scoped into the ES. The vast majority of these sites are not visible from the development site and therefore, consideration should be given to the tranquillity and change in noise levels of those sites. CADW specifically mention listed buildings ‘22037 Grand Lodge to Glan Gwna Hall’ and ‘22041 Bryn Eden and terrace walls to front’ as designations that could potentially be affected by increased noise levels. Assessment of these potential impacts should be prepared by a competent and qualified heritage expert and follow Welsh Governments Best Practice Guidance for Setting of Historic Assets in Wales (2017) and “Managing Change to Registered Historic Parks & Gardens in Wales”. This chapter is therefore linked to the chapter on Noise.	B
Landscape and visual amenity	IN	MPA agree broadly with the approach given in the Scoping Report. The landscape and visual impact of the quarry and operations associated with the construction of the bypass (such as other temporary haulage roads) have been	B

		<p>thoroughly assessed during the previous planning applications and ES submitted in 2017. The previous landscape and visual impact assessment have considered the baseline of impacts on main visual receptors including statutory and non-statutory landscape designations, recreational routes, registered parks & gardens, UNESCO World Heritage Site, cultural heritage assets and information derived from the local authority Strategic Landscape Character Areas (LCA) and Natural Resources Wales LANDMAP data system.</p> <p>Whilst there is no significant visual change to the construction site compound (only the delay of the restoration of that area), the proposed haulage road and new access will be set beyond the 2017 permissions and scope of the previous ES. Therefore, the potential landscape and visual effects of the permanent new haulage road and access have only been partially assessed.</p> <p>MPA recommend that the landscape and visual impact assessment is updated to include and assess the proposed permanent haulage road and vehicular access to the highway.</p>	
Ecology and Nature Conservation	IN	MPA require an updated baseline by means of records enquiry to COFNOD and data from Caernarfon bypass work. NRW recommend consideration of lighting impact on bats and otters.	B
Geology and soils	OUT	Disturbance of the ground surface is only proposed for the creation of the new site entrance adjacent to Plas Treflan. The protection of soils from pollution is managed through existing control processes. It is proposed that Geology and soils are scoped out of further consideration. MPA gave no comment.	
Noise	IN	MPA agree with proposed comparison between the activity rate during bypass construction and the proposed continued activity rate, both for the HGV movements on the haul road and for the material processing / concrete batching operations in the yard. Noise calculation to be used if live data not available. The baseline data should be updated and used to review any existing site noise limits that apply to existing	B

		operations and/or suggest mitigation to minimise impact upon the amenity of nearby noise sensitive properties.	
Effect on community assets	OUT	Use of Footpath 13 along the northern bank of the Afon Seiont would not be affected by the proposed development. Footpath 31 connects Waunfawr Road, just east of Peblig Industrial Estate, with the minor road leading south-westwards from Glan Gwna Terrace, Caeathro. The footpath crosses that road at the northern edge of 'Bwthyn Bach' holiday cottages. The footpath is now interrupted by the embankment of the A487 Caernarfon bypass. If the footpath is still in use, via a crossing or diversion, then the proposed haul route and low frequency of HGV traffic would not interfere with pedestrian use of the footpath. For these reasons effects on community assets are scoped out of further consideration.	
Traffic generation and effects	IN	<p>MPA require statement of traffic generation from import of materials and export of products, in form of an updated Traffic Impact Assessment to confirm vehicle flows, noise, air quality, vibration and reflect the changes in using the A4085 for heavy traffic movements and increase of duration of operations.</p> <p>MPA advise that consideration should be given to the cumulative traffic impacts of the proposal in addition to the existing Glan Gwna holiday park and proposed redevelopment of the Peblig Industrial Estate (if permitted). Vehicular access of these two sites is relatively close to the proposed new access and it is imperative that the cumulative impacts are fully considered.</p>	B
Drainage and the water environment	IN	<p>MPA note that the majority of the proposed new site compound, storage area, concrete batching plant, inert waste recycling site (including the site access via Ffordd Melin Seiont) are located within a 'C2 Flood Zone' as defined by the Welsh Government development advice maps. Technical Advice Note (TAN) 15 'C2' as "Areas of the floodplain without significant flood defence infrastructure" and "...that only less vulnerable development should be considered subject to</p>	B

		application of justification test, including acceptability of consequences. Emergency services and highly vulnerable development should not be considered. NRW have stated that they are content that the data used in the previous ES for the 2017 planning permissions is sufficient for a 5-year extension to the temporary development. This chapter presents that data which shows that predicted flooding affects a much smaller area.	
Water quality	IN	MPA agree that the topic is limited to the review of the existing pollution plan including the preparation of concrete on the site, with plans, maps and conclusions. MPA request that connection of office to public sewer system is confirmed within the EIA and accompanying application and that other arrangements such as package treatment plant would not be considered.	B
Other cumulative effects with the bypass	IN	The MPA identified other developments in the local area (such as planning application reference C22/0696/14/LL 'redevelopment of Peblig industrial estate and the recently completed Caernarfon bypass) that should be considered cumulatively with this project and will need to be assessed. The bypass (now open to traffic) would be considered as part of the current baseline but other proposals now justify a separate chapter for cumulative effects.	B
Greenhouse gases and climate change	OUT	Agreed by MPA due to small scale of the proposed operations.	
Health Impact	OUT	Agreed by MPA as proposal is continuation of temporary activities assessed in previous applications	
Risk of disaster	IN	The MPA conclude that there are no major installations in the vicinity of the site that could impact upon its operations. The nature of the development is not particularly susceptible to natural disasters. However, the site lies within a 'C2 Flood Zone' on the Seiont river floodplain, therefore, this chapter should refer the potential of flooding disasters in relation to operations on site as well as staff evacuation/emergency	B

		services access/major accident etc. This topic is explained in section 5 and refers to the 'Drainage and the water environment' chapter.	
Population and socio – economic effects	OUT	The MPA advise that an assessment of the socio-economic benefits and viability of the continued working at the site and its contribution to sustainable Welsh speaking communities and future generations should form part of the planning statement	
Planning Policy	IN	<p>The MPA advise that the ES should include an assessment of policy which includes consideration of waste, energy and mineral policies (sterilization). In undertaking a comprehensive assessment this should avoid the need to resubmit the same information under the guise of a Waste Planning Assessment as required by TAN 21 and should also include evidence of compliance with the R1 Formula. Therefore, the chapter should cover what is required as part of a Waste Planning Assessment in being appropriate and proportionate to the nature, size and scale of the development proposed and should provide all of the information necessary for the local planning authority to decide the application. Proposals for developments falling under disposal and recovery operations should explain in the Waste Planning Assessment, set out in Annex B, where the proposal fits within the waste hierarchy and why it represents the best overall environmental outcome.</p> <p>Any environmental statement should take account of revisions and new guidance, policy or legislation which may be published.</p>	A

- 1.4.2 In deciding that Air Quality effects could be scoped out, the assessment noted that the emissions to air that could arise from the classes of operation proposed for this site are a) dusts and particulates from the crushing, screening and blending of inert wastes, handling of raw materials and cement used in concrete batching, and disturbance of dust from the ground by passage of vehicles; and b) particulates and NOx emitted by diesel engines from HGVs and plant.
- 1.4.3 Ysbyty Eryri lies approximately 150m west of the processing area. The nearest residential properties lie approximately 200m north-west of the processing area. The transmission of dust from the processing area to these receptors would require a combination of dry conditions and an easterly or

south easterly wind strong enough to mobilise any settled dust. The ES submitted with the application leading to permission C17/0011/19/MW showed in section 6.3 that those conditions were likely to arise on only a few days each year. The operator's continued implementation of dust controls including site sweeping or damping with water would therefore be able to maintain the site and avoid significant dust effects.

- 1.4.4 The number of HGV movements associated with the proposed recycling and continued concrete batching operations is set out in the Screening Report (see Appendix A, section 3 'Traffic and transportation'). Additionally, one or two loads per day (2 or 4 HGV movements) would occur in relation to the proposed B8 General storage area. As described in that report, the proposed HGV traffic on the haul road and the A4085 Waunfawr Road is well below the threshold of 200 HGV movements per day at which air quality effects would be 'scoped in' to environmental assessment (DMRB LA105 – Air Quality (rev 0 Nov 2019)).
- 1.4.5 The existing site management processes would continue to be used to control dust and particulate emissions. This site has operated under permission C17/0011/19/MW throughout the bypass construction. There have been no complaints of dust or particulates and operations have satisfied all inspections by regulators including Gwynedd Council, NRW and internal company environmental audit procedures. There is no reason why this standard of operation would not continue. For this reason the MPA agreed that air quality effects should be scoped out of the Environmental Assessment.
- 1.4.6 In deciding that 'Greenhouse gases and climate change' should be scoped out, it is noted that greenhouse gas emissions would derive from the use of diesel fuel for transport and mobile site plant such as loading shovels. The static plant for concrete batching, conveyors etc would use mains electrical power wherever possible. The operator closely monitors fuel use on all its sites, and trains plant operators in efficient working to minimise fuel consumption. Recycling aggregates and the production of concrete at this location would largely or fully substitute for the same products manufactured elsewhere and so not increase the overall production of greenhouse gases. The provision of local recycling and concrete production facilities would make a modest contribution to reducing road transport, by providing materials closer to markets than existing production facilities elsewhere.
- 1.4.7 The EIA process requires consideration of whether the Proposed Development is likely to have significant impacts on another European Economic Area (EEA) State ('transboundary impacts'). In this case the nearest states are Eire, some 115km to the west and France some 400km to the south-south-east. As the likely impacts of a development of this type are localised, it is concluded that significant impacts on another EEA state can be ruled out.
- 1.4.8 The MPA noted that the proposal includes extending the temporary activities that are already in operation subject to planning permissions C17/0011/19/MW and C17/0107/19/LL and associated EIA/ES. Given that impact on human health deriving from the development has already been assessed during these applications and that there is no significant change in the operations it is considered that there is no need for an additional Health Impact Assessment.
- 1.4.9 The MPA noted that an assessment of socio-economic impacts has not been addressed in the Scoping Report and the authority concludes that it may be scoped out of the EIA. In line with MPA advice, an assessment of the socio-economic benefits and viability of the continued working at the site and its contribution to sustainable Welsh speaking communities and future generations does form part of the planning statement submitted in support of the development proposals.
- 1.4.10 The MPA noted that in providing information usually required by a Waste Planning Assessment, the ES should include evidence of compliance with the R1 Formula. This formula relates to the efficiency of

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energy recovery in ‘energy from waste’ projects. For the avoidance of doubt, the proposal to which this ES relates is for the recycling of inert wastes only, with no potential for energy recovery. The R1 formula does not apply in this case.

- 1.4.11 The MPA noted that The Conservation of Habitats and Species Regulations 2017 require competent authorities, before granting consent for a plan or project, to carry out an appropriate assessment (AA) in circumstances where the plan or project is likely to have a significant effect on a European site (either alone or in combination with other plans or projects). The ES chapter on Ecology and Nature Conservation has been written to provide sufficient information to the competent authority to enable them to carry out an AA or determine whether an AA is required.

2 Project description

2.1 Project history

- 2.1.1 The site of the former Seiont brickworks factory is currently used as a temporary compound in connection with the Caernarfon to Bontnewydd bypass construction project, under two Planning Permissions, reference C17/0011/19/MW and C17/0107/19/LL. This area contains offices, mobile concrete batching facilities, heavy plant workshop facilities, materials processing and storage areas and associated car parking. Planning Permission C17/0107/19/LL is applicable to these existing operations at the site.

<p>Planning Permission C17/0107/19/LL Proposal:</p> <p>Application for temporary planning permission for works associated with the construction of the proposed A487 Caernarfon to Bontnewydd bypass including:</p> <ul style="list-style-type: none"> • Site compound and provision of a maintenance shed, office accommodation, welfare and car parking facilities, fuel store, sewage storage tank, mobile concrete batching plant, mobile asphalt batching plant and provision of a haul route

- 2.1.2 During the construction of the bypass, approximately 33,900 m³ of concrete was prepared at the site and transported for use in the works; approximately 46,081 t of asphalt was prepared and transported for use in the works; and approximately 200,000 t of demolition materials (concrete and excavated hard material) was recovered, crushed and prepared for re-use in the works.
- 2.1.3 Bypass construction works are substantially complete, and the site operator wishes to continue certain operations. The operator is now seeking a new planning permission for ‘Creation of new vehicular access and associated visibility splays and alterations to Waunfawr Road, creation of internal access road, stopping up of access to Plas Treflan together with the change of use of land for general storage (B8 use class), concrete batching plant area, recycling area, erection of new recycling plant building, plant maintenance and retention of workshop building, and the retention of portacabins to be used as offices with associated parking’ all on a permanent basis. Although the Screening and Scoping processes described in sections 1.1 and 1.2 were for a further temporary application, none of the topics was scoped out for reason of the temporary nature of the proposal and so the screening and scoping exercise is considered to remain valid.
- 2.1.4 Older planning permissions allowing clay extraction and brick manufacture remain in place until 2042. The main permission is code C00A/0441/14/MW issued on 10th May 2007 following a Review of Old

Mineral Permissions ('ROMP') process. This updated the permission and conditions covering clay working, the re-use of soil waste, site restoration work and associated activities at Seiont Quarry. A second permission of the same date, code C00A/0442/14/MW, covers the continued re-use and dispersal of mineral waste.

2.2 Proposed works and operations

2.2.1 This application seeks consent for the permanent use of the land and the construction of a new permanent vehicular access from Waunfawr Road to serve these uses of part of the site as well as facilitate the potential future use of the site. The key parameters currently envisaged are set out in Table 2. The alignment and surface area of the proposed haul route and access onto Waunfawr Road would be as shown in Drawing WSP 9432-SK-1001 C (Appendix E3). To allow some flexibility in layout and the proportion of land uses, the position and area allocated to each of the activities A – E would not be fixed: the total shown in Table 2 would not be exceeded and the intensity of use would be limited to the quantities shown by means of conditions.

Table 2 Key parameters of the project

Activity	Approx area	Quantity
A: General Storage use (Class B8) including sorting and packing cobbles and boulders for sale	5,350 m ²	Average 10 HGV loads per week
B: Concrete batching plant area	2,700 m ²	10,000 m ³ annual output 18,000 t aggregate import/yr 3,000 t cement import/yr 4 staff
C: Recycling area for soils, construction and demolition waste, including building to enclose the crusher Product sold for use off site. Any residual waste disposed of off site.	5,800 m ²	75,000 t annual throughput (concrete, bricks, tiles and ceramics, soil, stones and mixtures of these) 3 staff
D: Plant maintenance and storage area including retention of existing workshop/fitter shed	5,000 m ²	3 staff
E: Mobile offices, weighbridge and welfare cabins, with staff parking	2,700 m ²	1 staff Facilities serve all site staff and HGV drivers
TOTAL AREA ALLOCATED TO ACTIVITIES A - E	21,550 m²	

Haul route with footpath/verges 835m x 10m nominal width	8,350m ²	
New access point to Waunfawr Road (additional area for turning splay, ghost island and footway)	850m ²	

2.2.2 The scale or intensity of the proposed activities may be compared with the scale or intensity during the construction of the bypass in the period 2019 – 2021 inclusive, as shown in Table 3.

Table 3 Comparison with period of bypass construction

Activity	Proposed Quantity	Previous quantity during bypass works (2 years approx)
A: General Storage use (Class B8) including sorting and packing cobbles and boulders for sale	Average 10 HGV loads per week = 500 loads per year	Nil
B: Concrete batching plant area	10,000 m ³ annual output 18,000 t aggregate import/yr 3,000 t cement import/yr	33,900 m ³ of concrete 46,081 t of asphalt
C: Recycling area for soils, construction and demolition waste, including building to enclose the crusher Product sold for use off site. Any residual waste disposed of off site.	75,000 t annual throughput (concrete, bricks, tiles and ceramics, soil, stones and mixtures of these)	200,000 t recycled
D: Plant maintenance and storage area including retention of existing workshop/fitter shed	Serving plant and vehicles from short term company projects in NW Wales	Serving 90 heavy plant items and 50 site vehicles
E: Mobile offices and welfare cabins, with staff parking	Approx 15 staff between all activities 20 car parking spaces incl for visitors	Approx 300 staff 200 car parking spaces incl for visitors

2.2.3 Site plans provided in Appendix E provide the following information:

- boundary of the planning application site
- land ownership, for the site and adjacent land owned by the applicant
- zones allocated to each proposed activity
- location and dimensions of proposed building to enclose a crusher
- access points connecting to public highways

- transport routes likely to be used by traffic serving the proposed land uses
- setting of the site (OS base) indicating features referred to.

2.2.4 The importation and recycling of inert materials will be controlled by an Environmental Permit (Standard Rules SR2010 No12 ‘Treatment of waste to produce soil, soil substitutes and aggregate’) to be obtained from NRW. The types of waste that would be accepted for recycling meet the European Waste Code classifications set out in Table 4.

Table 4 Proposed waste materials for recycling

Code	Class
17	CONSTRUCTION AND DEMOLITION WASTES
17 01	Concrete, bricks, tiles and ceramics
17 01 01 17 01 02 17 01 03 17 01 07	Concrete bricks tiles and ceramics mixtures of concrete, bricks, tiles and ceramics other than those containing hazardous substances
17 03	Bituminous mixtures
17 03 02	Bituminous mixtures other than those containing coal tar
17 05	Soil and stones
17 05 04	Soil and stones other than those containing hazardous substances
19	WASTES FROM WASTE MANAGEMENT FACILITIES
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	Minerals (for example sand, stones)

2.2.5 The mobile and static plant used for concrete batching and for the recycling of materials would be kept under review and selected according to the demand for material and developments in the machinery available. The list in Table 5 is therefore indicative but based on the maximum capacity / throughput stated in Table 2. Illustrative drawings are presented in Appendix F.

Table 5 Operating plant list

Operation	Typical equipment
Concrete batching plant	STATIONARY: MCM60 batching plant with 2 sealed cement silos (road mobile plant able to be relocated, no fixed foundations) MOBILE: Loading shovel

Recycling of soils, construction and demolition waste	<p>STATIONARY: Crusher with integrated screener and conveyor belt discharges. Lokotrack 106S or similar (tracked plant able to be moved within site, or by low-loader on roads)</p> <p>MOBILE: 360° tracked excavator, loading shovel</p>
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2.3 Site preparation works

- 2.3.1 Much of the site is already in use for the purposes contained in the proposal, and so minimal preparation work would be needed. The existing haul route used during bypass construction remains, but limited trimming, regrading and topping with selected aggregate is required to maintain a suitable surface for HGV traffic. The main work required would be to form the new access onto Waunfawr Road. This work would consist of excavating soils down to formation level, placing and compacting stone capping and sub-base layers, the laying of bituminous surfacing and white lining. Carriageway drainage would also be installed. Full details of this access construction would be agreed with the highway authority (Gwynedd Council) and all works affecting the adopted highway would be carried out under the relevant permits from the highway authority.
- 2.3.2 Some of the temporary office accommodation used during the construction of the bypass has been removed as it became surplus. The proposal is to retain sufficient for the continued operations at the site. This accommodation already has connection to mains electricity and water services which would be retained, and so there would be no requirement for site generators (apart from back-up power in the event of supply failure or for temporary remote working). DCWW indicated that reconnection to the former brickworks' sewer system would be accepted. NRW strongly prefer mains connections instead of a septic tank or 'package' sewage treatment system, but this application includes retention of the temporary tank system pending the implementation of the mains connection.
- 2.3.3 Preparation of the materials recycling area would require some reconfiguration of bays for the separate materials but these bays are formed from movable concrete blocks and so adjusting the positions of dividing walls is a straightforward operation. To house the crusher and contain noise, a further steel-framed building matching the existing plant maintenance workshop would be erected. The dimensions are shown in drawings presented in Appendix G.
- 2.3.4 A small open lagoon would be excavated and lined, to hold the water and washings from concrete delivery wagons. This water would be recycled into concrete production. The lagoon would be fenced for safety.

2.4 Management of wastes, residues and emissions

- 2.4.1 The wastes, residues and emissions which could possibly arise from the proposed operations are set out in Table 6 together with a summary of the management methods to be applied. Further detail is given in the relevant topic chapters.

Table 6 Management of wastes residues and emissions

Activity	Possible waste, residue or emission	Management applied
A: General Storage use (Class B8)	Packaging material	Inspect, collect and repack if wrappings etc have deteriorated

	Fine product as dust or silty run-off	Firm down or cover product. Channel run-off to settlement pond
B: Concrete batching plant	Cement dust	Prevented by sealed system for delivery, storage and use. Regulated by Part B permit issued and audited by Gwynedd Council
	Mixer wash-water	Discharged to contained settlement lagoon for recycling into concrete product process
C: Recycling area for soils, construction and demolition waste	Segregated during processing (eg rebar) Residual fine material	Removed from site to licensed recycling or disposal site
	Dust from aggregate processing	Suppressed by water spray system on processing equipment
	Dust from movement of plant and vehicles	Minimised by maintenance of working surface, and by use of water bowser
	Clean rainwater from crusher shed roof	Stored and used in dust suppression and toilet flushing
D: Plant maintenance and storage area including retention of existing workshop/fitter shed	Waste oil, consumable parts eg filters, worn tyres etc from plant. Packaging from parts and consumables	Segregated, stored in designated area and removed for recycling or disposal by specialist waste broker
	Dust from movement of plant and vehicles	Minimised by maintenance of working surface, and by use of water bowser
E: Mobile offices and welfare cabins, with staff parking	Office wastes eg paper. Canteen and welfare waste eg wrappers, paper towels	Segregated, stored in designated area and removed for recycling or disposal by specialist waste broker
	Toilet and washroom drainage	Mains drainage connection

2.4.2 Environmental Permits issued by Natural Resources Wales would govern the operation of the materials recycling work, as stated in para 2.2.4. The concrete batching plant would be operated as a Part B installation involving the Blending, Packing, Loading, Unloading and Use of Bulk Cement activity, as prescribed in Section 3.1 Part B of Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2016. The application for this Permit would be made to Gwynedd Council.

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3 The site and its setting

3.1 Location

3.1.1 The site of the former Seiont Brickworks lies on the south-eastern side of the town of Caernarfon, Gwynedd. The area is substantially the site of the former Seiont brickworks which comprised a brick clay quarry and brick production factory. The factory area is currently used as a temporary compound in connection with the Caernarfon to Bontnewydd bypass construction project. This area contains offices, mobile concrete batching plant, heavy plant workshop facilities, materials storage areas and associated car parking.

3.1.2 There is currently a partially-filled quarry void to the east of the application site which is owned by the applicant. The Caernarfon to Bontnewydd bypass, which recently opened, lies beyond the quarry void to the east. The house 'Plas Treflan' lies to the west of the application site and is also within the applicant's ownership. Beyond Plas Treflan to the west lies the Peblig Industrial Estate. Afon Seiont runs along part of the western boundary of the application site, beyond which lies Ysbyty Eryri and the residential estates of Tyddyn Llwydyn and Glan Seiont. Residential properties are located along Seiont Mill Road.

3.2 Access

3.2.1 Access to the application site is available from Seiont Mill Road, which also provides access to a separate brickyard to the south-west of the quarry, physically separated from the remainder of the site by the Afon Seiont. There is also a haul route from Waunfawr Road which has been constructed in connection with the site's use as a compound connected to the construction of the bypass. The application site includes this haul route which is proposed to be constructed as an internal access road connecting the area of the former factory and brickworks site with Waunfawr Road to the north. The bypass haul route crossed the A4085 Waunfawr Road which was closed to traffic during construction, but did not have a connection to it. A new junction forms part of the present application.

3.2.2 Although the new bypass is aligned along the south-eastern edge of the quarry site, there is no direct access to and from the site. Waunfawr Road would be used by site traffic to reach the A487 by travelling to the Caethro roundabout and on the A4085 either northbound or southbound to junctions with the A487.

3.3 Designated sites

3.3.1 The quarry site includes a Regionally Important Geological Site (RIGS) (designated in 2001), known as the Pen Y Bont (Seiont Brickworks). The RIGS status is attributed to the associated Quaternary history and organic deposits of the pre-glacial age.

3.3.2 There are three international conservation sites within 5km of the application site, with a further one just over 5km away. They are described in detail in the 'Ecology and Nature Conservation' section of this Environmental Statement, together with biodiversity Sites of Special Scientific Interest within 5km of the application site.

- Menai Strait and Conwy Bay Special Area of Conservation (SAC) (around 1.5km to the north-west)
- Abermenai to Aberffraw Dunes SAC (around 4.5km to the west)
- Glannau Mon: Cors Heli SAC (around 4.5km to the west)
- Glynllifon SAC (around 5km to the south).

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- 3.3.3 The Afon Seiont SSSI, located just west (downstream) of the former A487 Pwllheli Road, is designated for its geological exposures and so there is no connection between the proposed development and this site.
- 3.3.4 The World Heritage Site of Caernarfon Castle lies 1.3 kilometres to the northwest of the site, but neither is visible from the other due to the topography. A number of other buildings with Listed status are present within a 3km radius of the site. The potential for effects on these is considered in the 'Cultural Heritage' section of this ES, in accordance with the agreed scope noted in 1.4.

3.4 Planning history

- 3.4.1 The former brickworks on the application site continued in productive use until around 2008 when production ceased and the building was demolished. Clay extraction from the adjoining clay pit was suspended. The existing permissions allowing clay extraction and brick manufacture remain in place until 2042. The main (2007) planning permission (code number C00A/0441/14/MW) relates to clay working, re-use of soil waste and restoration work together with associated and additional works at Seiont Quarry.
- 3.4.2 The site of the former Seiont brickworks factory is currently used as a temporary compound in connection with the Caernarfon to Bontnewydd bypass construction project, under two Planning Permissions, reference C17/0011/19/MW and C17/0107/19/LL. This area contains offices, mobile concrete batching facilities, heavy plant workshop facilities, materials processing and storage areas, and associated car parking.

3.5 Planning Policy

- 3.5.1 The National Waste Strategy Towards Zero Waste – One Wales: One Planet 2009 provides an overarching framework for the management of all types of waste, with the overall aim of reducing residual waste to zero by 2050. It is supported by a series of sector plans which details how the outcomes, targets and Policies in Towards Zero Waste are to be implemented.
- 3.5.2 Planning Policy Wales and Technical Advice Note (TAN 21) set a framework for facilitating the delivery of sustainable waste management infrastructure through the planning process. TAN 21 advises that when “considering development proposals for all types of waste management facilities, planning authorities should take into account their potential contribution to the objectives, principles and strategic waste assessments set out in Towards Zero Waste and the relevant waste sector plans and the relevant development plan for the area. The extent to which a proposal demonstrates this contribution, in environmental, economic and social terms, will be a material planning consideration. The aim is to ensure that the right facilities are located in the right place to meet environmental, economic and social needs. At both a strategic and site level this means accepting that waste will need to be managed in all areas of Wales, that economic considerations relating to demand and viability may affect what management options can be acceptably brought forward in an area, that transportation considerations may effect whether a proposed location is suitable and that all proposals must be environmentally acceptable.”
- 3.5.3 The Waste Hierarchy as set out in TAN 21 advises that where it is not possible to reuse materials and products or prepare them for reuse, recycling should be encouraged as it can reduce demand for resources and reduce atmospheric emissions.
- 3.5.4 The adopted development plan consists of Anglesey and Gwynedd Joint Local Development Plan (JLDP), which was adopted in July 2017. Strategic Policy PS 21: Waste Management states:

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The Councils will seek to ensure an adequate availability of land in appropriate locations for an integrated network of waste facilities to meet regional and local obligations in accordance with the requirements of the current relevant national/regional policy/guidance. The sites and types of facilities chosen will promote a sustainable approach to waste management based on the waste hierarchy of prevention and reuse, preparation for reuse, recycling, other recovery and then disposal whilst taking into consideration the unique character of the area including the transport links and rural nature.

- 3.5.5 Policy GWA 1: Provision of Waste Management and Recycling Infrastructure goes on to advise that land and property listed in the policy are allocated for the provision of infrastructure that could sustain or add to the range of suitable waste management facilities. The application site is not identified on the list.
- 3.5.6 The policy goes on to advise that in addition to the allocated sites, *“waste management and recycling infrastructure, excluding landfill and open windrow composting, may be acceptable on existing industrial estates, quarries and brownfield sites. Proposals for waste management and recycling infrastructure (which are not proposed on the above allocated sites) will be assessed on their own merit provided that there is a justifiable need for the development. The justifiable need should refer to the local need as specified within the Municipal Sector Plan and Collections Infrastructure and Markets Sector Plan (CIMSP).*
- Any new development must be suitable in terms of size and scale and must not have an adverse impact upon the landscape, the natural environment or the amenity and health of the local population. All new proposals for Waste Management facilities should be accompanied by a Waste Planning Assessment (as defined by Annex B of TAN 21, Waste).”*
- 3.5.7 The proposal seeks to utilise the application site for the siting of a concrete batching plant and recycling facility. Planning permission C17/0011/19/MW has granted permission for concrete batching facility at the site to be used during the period of construction of the bypass. The site of the former brickworks is considered to be previously developed land and this proposal would enable the existing facility to diversify and expand to export finished materials and products to the local market.
- 3.5.8 The application site is a windfall site that has become available and could be delivered immediately following the completion of the Caernarfon to Bontnewydd bypass. The proposed use comprises a general storage area (B8 use class), a concrete batching area, plant maintenance area and a recycling area, with a small office / welfare building.
- 3.5.9 Planning permission C17/0011/19/MW approved a restoration scheme for the site, which involved the infilling of the quarry void with imported material from the construction of the Caernarfon to Bontnewydd bypass. However, there was insufficient material from the construction of the bypass to enable the quarry void to be filled. Condition 8 of permission C17/0011/19/MW requires a detailed scheme of restoration and aftercare to be submitted for the site within three years from the date of commencement. The applicant is in discussions with the Mineral Planning Authority regarding the submission of a restoration scheme, which will reflect the outcome of the present application and a separate application for a standby electricity generation plant when determined. The site would then be restored in accordance with the restoration scheme to be submitted and approved as part of condition 8 of planning permission C17/0011/19/MW.
- 3.5.10 Caernarfon is identified as an Urban Service Centre in the JLDP and the application lies outside but in close proximity to the development boundary. It is recognised that Urban Service Centres provide a good range of employment, facilities and services that serve their own population as well as their wider catchment areas. Indeed, the upcoming national guidance “Future Wales; The National Plan: National Development Framework” identifies Caernarfon as a Regional Growth Area, and states that

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these areas should be recognised “...as a focus for housing, employment, tourism, public transport and key services within their wider areas and support their continued function as focal points for sub-regional growth”.

- 3.5.11 It is evident from the above that Caernarfon is a highly sustainable settlement and the site’s location close to the development boundary would constitute sustainable development in line with the Plan’s Spatial Strategy.
- 3.5.12 The need for the finished material that would be produced has been identified in the market by the applicant, and the proposal would enable the applicant to meet an identified current demand in both the short term and longer term. That market includes construction contracts undertaken by Jones Bros Ltd, particularly those on major infrastructure works for which the local, reliable and uninterrupted supply of concrete is essential. Further detail on the ‘proximity principle’ in relation to this proposal is given in section 3.7. The proposal would continue to provide employment opportunities in Caernarfon and would also support indirect jobs in the local economy.

3.6 Waste Planning Assessment – recycling

- 3.6.1 The NRW Waste Permit Returns Data Interrogator 2021² shows that less than 50% of the inert ‘hard materials’ (ie excluding soils) accepted at waste sites in Conwy, Gwynedd and Isle of Anglesey sites was recycled. Concrete, bricks, tiles and ceramics and mixtures of these materials are recyclable into aggregates and similar products.
- 3.6.2 Figure 1 (Appendix H) shows the location of existing permitted sites in north-western Gwynedd, in relation to Seiont Quarry and the road network. It can be seen that Seiont Quarry is the closest to, or second closest to, many of the example locations in the sub-region from which material suitable for recycling would come. The extension of material recycling at Seiont Quarry to include material sources other than the bypass works will provide for this market as well as for materials generated by and required by Jones Bros Ltd.
- 3.6.3 Co-locating a material recycling operation with a concrete batching plant will allow the higher-quality recycled materials to be allocated to the highest value use, without additional road haulage between sites. This fulfils one objective of the Waste Hierarchy and will conserve high-grade aggregate from quarry sites.
- 3.6.4 In paragraph 1.4.10 it is explained that the MPA noted that in providing information usually required by a Waste Planning Assessment, the ES should include evidence of compliance with the R1 Formula. This formula relates to the efficiency of energy recovery in ‘energy from waste’ projects. For the avoidance of doubt, the proposal to which this ES relates is for the recycling of inert wastes only, with no potential for energy recovery. The R1 formula does not apply in this case.

3.7 ‘Proximity principle’ – concrete production

- 3.7.1 Figure 2 Appendix H) shows the location of existing concrete suppliers in north-western Gwynedd, in relation to Seiont Quarry and the road network. It can be seen that Seiont Quarry is the closest to, or second closest to, many of the example locations in the sub-region at which customers would require ready-mixed concrete. The extension of concrete production at Seiont Quarry will provide for this market as well as for materials required by Jones Bros Ltd.

² NRW Data set DS116336

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- 3.7.2 Although most of the raw material used in concrete production at Seiont Quarry would be brought to the site before mixing, the proximity principle still applies because:
- Raw materials for concrete production (aggregate, sand, cement) are transported by HGV with a payload of around 30t per vehicle. Ready-mixed concrete is transported by mixer lorry with a payload of around 10 – 12t per vehicle.
 - Ready-mixed concrete contains added water which must then be transported by road from plant to user.
- 3.7.3 One HGV therefore transports as much material as three mixer lorries. The maximum efficiency and fewest HGVs on the road network are achieved when the mixing plant is as close to the user site as possible, and the larger HGVs can be used for as much of the overall journey as possible. This means having mixing plants in many well-distributed locations rather than a few centralised plants.

4 Consideration of alternatives

4.1 'Do minimum'

- 4.1.1 The 'Do Minimum' option would involve the removal of the existing batching and recycling plants, workshop and offices; and restoration of the site in accordance with existing planning permissions (see 3.5.9) or resumption of mineral extraction. Local markets for concrete and aggregates recycling would continue to be supplied from sites further afield.
- 4.1.2 This option has been discounted by the applicant because:
- This existing business activity would have to cease, ending the employment of staff and use of capital equipment
 - The restoration of the quarry site cannot be achieved with the restoration materials currently present

4.2 Other sites and uses

- 4.2.1 The applicant could seek an alternative site elsewhere in the vicinity, relocate the existing batching and recycling plants, workshop and offices and operate the proposed activities from there; restoring site in accordance with existing planning permissions (see 3.5.9) or resume mineral extraction
- 4.2.2 This option has been discounted by the applicant because:
- There would be substantial cost in obtaining the necessary planning permission(s) and permits, and in relocating the plant and offices
 - The alternative site would require similar services, drainage, road access and separation from sensitive neighbouring land uses
 - The restoration of the quarry site cannot be achieved with the restoration materials currently present
- 4.2.3 The applicant could also seek alternative uses for the Seiont site, finding other financially viable and environmentally acceptable uses for the land, with operators. The existing batching and recycling plants, workshop and offices would be removed. Local markets for concrete and aggregates recycling would be supplied from sites further afield.
- 4.2.4 This option has also been discounted by the applicant because:
- There would be substantial cost in obtaining the necessary planning permission(s) and permits, and in removing the plant and offices

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- This existing business activity would have to cease, ending the employment of staff and use of capital equipment
- No such land uses, acceptable in this location and compatible with the applicant's business, have been identified
- The restoration of the quarry site cannot be achieved with the restoration materials currently present

4.3 Transport requirements

- 4.3.1 Section 3.5 'Planning policy' includes the identification of other existing locations where concrete is produced for local markets and materials are recycled as soils and aggregates. An assessment of the transport distances and number of vehicles involved in supplying markets from these locations, compared to the Seiont Quarry site, is presented in the 'Traffic generation and effects' chapter.

5 The Environmental Assessment

5.1 Legislative basis for the assessment

- 5.1.1 The principal legislation applicable to Environmental Assessment for this type of project is contained within the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 ("The 2017 Regulations").
- 5.1.2 An Environmental Statement must contain information as outlined in Annex IV of council directive 97/11/EC (amending directive 85/337/EEC, June 1985) as is reasonably required to assess the environmental effects of the development. The scope of the ES is guided by the scoping opinion of the planning authority (refer to section 1.4 of this ES). In particular, the ES should cover:

A Description of the project, including in particular:

- a description of the physical characteristics of the whole project and the land-use requirements during the construction and operational phases;
- a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;
- an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, light, heat, radiation, etc.) resulting from the operation of the proposed project.

B An outline of the main alternatives studied by "The Developer" and an indication of the main reasons for this choice, taking into account the environmental effects.

C A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

D A description of the likely significant effects of the proposed project on the environment resulting from:

- the existence of the project;
- the use of natural resources;
- the emission of pollutants, the creation of nuisances and the elimination of waste;

- E the description by “The Developer” of the forecasting methods used to assess the effects on the environment.
- F A description of the measures envisaged to prevent, reduce and, where possible, offset any significant adverse effects on the environment.
- G A non-technical summary of the information provided under the above headings.
- H An indication of any difficulties (technical deficiencies or lack of know-how) encountered by “The Developer” in compiling the required information.

5.2 ‘Significance’

- 5.2.1 In this assessment, the approach to assigning significance to potential effects has followed the guidance set out in ‘LA104 Environmental assessment and monitoring’, part of the Design Manual for Roads and Bridges published by Highways England on behalf of the devolved governments of the UK. In summary, the approach is to assign a value or sensitivity to receptors/resources; assign magnitude to the predicted impact on that receptor; and then to assign significance based on a matrix which combines receptor value/sensitivity with the magnitude of impact. Professional judgement is applied throughout the process and so it is not purely mechanistic.
- 5.2.2 The following tables are extracted from LA104 for reference, but should be read in conjunction with the full document to obtain the context and explanation of their use.

Table 3.2N Environmental value (sensitivity) and descriptions

Value (sensitivity) of receptor / resource	Typical description
Very High	Very high importance and rarity, international scale and very limited potential for substitution.
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution.
Low	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

Table 3.4N Magnitude of impact and typical descriptions

Magnitude of impact (change)		Typical description
Major	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Moderate	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.

Minor	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.
No change		No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Table 3.8.1 Significance Matrix

		Magnitude of impact (degree of change)				
		No change	Negligible	Minor	Moderate	Major
Environmental value (sensitivity)	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or slight	Slight	Moderate	Moderate or large
	Low	Neutral	Neutral or slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

5.2.3 Once significance has been determined for each predicted effect of the project, the decision maker (in this case the planning authority) will take account of those which are considered ‘material’ to the planning process.

Table 3.7 Significance categories and typical descriptions

Significance category	Typical description
Very large	Effects at this level are material in the decision-making process.
Large	Effects at this level are likely to be material in the decision-making process.
Moderate	Effects at this level can be considered to be material decision-making factors.
Slight	Effects at this level are not material in the decision-making process.
Neutral	No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

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5.2.4 In this assessment, any deviations from this approach are recorded in the specialist topic chapters. Specific factors or considerations which define or guide the assessment are also stated in those chapters.

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Appendix A - 2021.058_05 Request for EIA screening

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Appendix B – Cyngor Gwynedd EIA Screening Opinion C22/0314/19/SC

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Appendix C – Seiont Quarry EIA Scoping Report

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Appendix D – EIA Scoping response letter

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Appendix E - Site Plans

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Appendix F - Concrete and crushing plant

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Appendix G - Crusher building drawings

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Appendix H - Waste recycling and concrete batching sites

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Appendix I - Selection of site photographs



Aerial image during bypass construction March 2021



Materials recycling area April 2022



Plant workshop and maintenance area
April 2022



Open storage area at rear of temporary offices
April 2022



Location of new road access, Plas Treflan with bypass embankment beyond April 2022

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Continuation of industrial land uses at former
Seiont Brickworks, Caernarfon
Environmental Statement Part B

Seiont Ltd

December 2023

Revisions Control Page

Date	Summary of Changes Made	Changes Made By (Name)
07.12.2023	Issue for PAC consultation	Stephen Blunt

DRAFT

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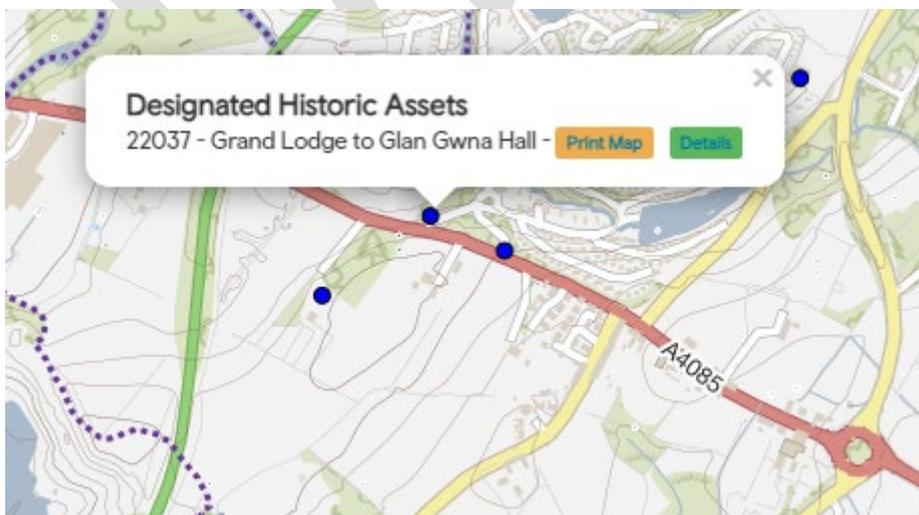
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Former Seiont Brickworks, Caernarfon – Environmental Statement Part B

6 Cultural Heritage

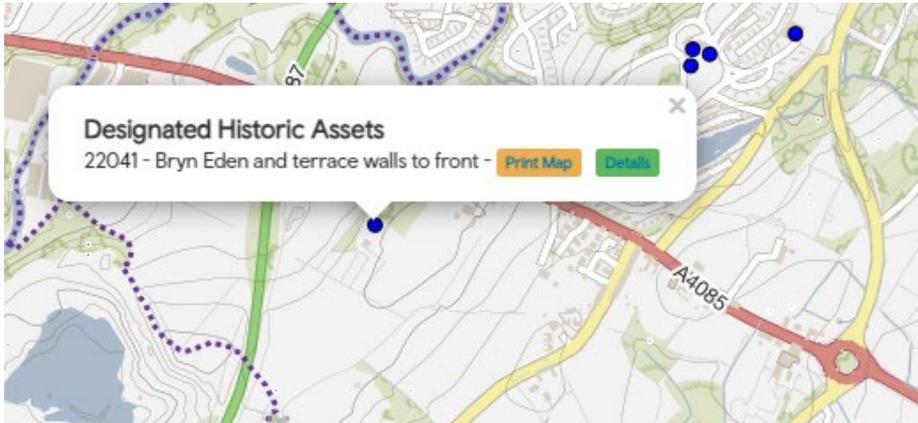
6.1 Cultural Heritage baseline

- 6.1.1 The proposal is for the continued use of land within the bypass construction site compound (the former brickworks yard), and for creation of a new access between the bypass haul road and Waunfawr Road at Plas Treflan. The property Plas Treflan has no historic designation, and works would be limited to the visibility splay at the property’s frontage onto Waunfawr Road.
- 6.1.2 Cadw advised at Scoping stage that the potential effects on sites within 3km radius should be a material planning consideration and should be scoped into the ES. The vast majority of these sites are not visible from the development site and therefore, consideration should be given to the tranquillity and change in noise levels of those sites. The 2016 Environmental Statement confirmed that the World Heritage Site of Caernarfon Castle lies 1.3 kilometres to the northwest and there is no inter-visibility with the quarry.
- 6.1.3 Cadw specifically mention listed buildings ‘22037 Grand Lodge to Glan Gwna Hall’ and ‘22041 Bryn Eden and terrace walls to front’ as designated sites that although not visible from the proposed development, could potentially be affected by increased noise levels. The location of these sites is shown on Cadw records at <https://cadw.gov.wales/advice-support/cof-cymru/search-cadw-records>. Both are separated from the application site by the embankment of the recently-built A487 Caernarfon bypass and so have no intervisibility.
- 6.1.4 22037 Grand Lodge to Glan Gwna Hall was included in the Grade II Listing ‘as a well-preserved late C19 lodge of Picturesque style at the former south-western entrance to Glan Gwna Hall’. It is located on the north side of Ffordd Waunfawr and is therefore exposed to effects from HGV traffic generated by the proposed development. The full Cadw Listing Report is presented in Appendix I. This property appears to be in use as a private house. It can be glimpsed from the public highway but is largely screened by the boundary wall and trees. Designated asset 22054 ‘Gate piers and walls at entrance to Glan Gwna Hall’ is located just to the east along the same road.



- 6.1.5 22041 Bryn Eden and terrace walls to front was included in the Grade II Listing ‘as a largely unaltered mid-C19 house, employing a mixed Italianate and Gothic architectural vocabulary, important for the

evidence it provides of increasing prosperity in the nearby county town at this time'. It is set back some distance from the south side of Ffordd Waunfawr, and is therefore exposed to effects from HGV traffic generated by the proposed development. The full Cadw Listing Report is presented in Appendix I. This property appears to be in use as a private house. It can be glimpsed from the public highway but is largely screened by intervening properties, the boundary wall and trees.



6.2 Noise arising from the development

6.2.1 Two sources of noise arising from the development were considered in this assessment:

- Noise generated by the concrete batching and material recycling operations at the application site
- Noise generated by additional HGV traffic on the A4085 Waunfawr Road, serving the development.

6.2.2 The noise from each source, and propagation to these sites, was determined specifically as part of the noise assessment (Chapter 9), and found to be within the criterion (5dB above background) at which an adverse impact could occur at the nearest receptors. Bryn Eden is the closer of the two sites to the noise source within Seiont Quarry and so that relationship has been assessed as the worst case. Bryn Eden is 770m from the quarry, more than 500m further than the nearest receptors, and separated from it by the embankment of the Caernarfon bypass which stands some 6m above the adjoining ground, forming a further barrier to noise propagation.

6.2.3 Grand Lodge to Glan Gwna Hall lies close to, but a little below the level of, Waunfawr Road and is partly shielded by the boundary wall which interrupts noise generated close to the ground by tyres and vehicle engines.

6.3 Assessment of impact

6.3.1 CADW's response to the initial screening direction concluded in short that the proposed development was unlikely to have a significant effect on the designated heritage assets. Neither Bryn Eden nor Grand Lodge to Glan Gwna Hall is directly accessible to the public, but their heritage value might be appreciated by users of nearby public spaces such as footpaths.

6.3.2 Bryn Eden may be visible from one footpath which has now been truncated by the bypass embankment. Glimpses of Grand Lodge to Glan Gwna Hall are available from the footway of the A4085 Waunfawr Road but this is on the opposite side of the carriageway. No noise generated by the proposed site activities would be perceptible at either Listed Building. Additional traffic on the A4085 Waunfawr Road is shown in Chapter 10 to be 11.5 vehicles per hour which is not sufficient to affect

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the perception of users of the footway. The tranquillity of the settings would not be affected by the development.

6.3.3 The proposed development would therefore have no impact on cultural heritage.

7 Landscape and visual amenity

7.1 Landscape and visual assessment

7.1.1 The proposal is for the continued use of land within the bypass construction site compound (the former brickworks yard), and for creation of a new access between the bypass haul road and Waunfawr Road at Plas Treflan. All land within the proposal boundary is within or adjacent to land currently disturbed and in use for bypass operations. The effects of continued working are therefore visual impact effects and not direct landscape-scale effects.

7.1.2 The current 'Do-minimum' situation is the restoration of the former factory yard as a grassed open space under existing permissions, as described in section 4.1 of this ES. The proposed continuation of use would delay permanently (but not ultimately prevent) the restoration of land within the application boundary, but does not directly affect the restoration proposals or timetable for the remainder of the mineral working site.

7.1.3 Visual effects and indirect landscape effects of the proposed continued use are described in detail in the specialist report 'Landscape and Visual Impact Assessment' v2 prepared by RML and attached as Appendix J.

7.2 Baseline

7.2.1 The Seiont Brickworks is in an area of low rolling hills that form the broad transition between the mountains of Eryri to the narrow coastal strip. The topography has a broad north-east to south-west grain that is expressed as a range of parallel ridges and shallow valleys. Many of the watercourses have formed steep-sided wooded valleys. The proposed development is located within the Afon Seiont valley directly south-east of Caernarfon and north-west of the Caernarfon and Bontnewydd bypass. Brick working is a long-established activity within the valley.

7.2.2 Statutory landscape designations in the study area are:

- UNESCO World Heritage Site – Castles and Town Walls of King Edward in Gwynedd. Approximately 1.6 km north-west of the development
- National Park – Eryri. At its closest boundary located at Betws Garmon, Eryri is about 6 km distant from the proposed development.
- Area of Outstanding Natural Beauty ('AONB') – Ynys Môn/Anglesey. At its closest point the boundary of the AONB located on the Menai Strait is about 2.4 km north-west of the development.
- Registered Parks and Gardens of Historic Interest – Morfa Common Park. Within the study area Morfa Common Park is immediately downriver of Seiont Brickworks.

7.2.3 There are a number of non-statutory designated landscapes in the County, the closest of which is about 2.8km to the west of the proposal site.

7.2.4 Broadly, the ZTV shows that there would be no view of the development from the World Heritage Site, the National Park or the AONB but the development would be visible from a small part of the WHS Essential Setting, and from the edge of Morfa Common Park. Plant and building would be visible from locations within the immediate vicinity including developed areas of Caernarfon that are to the north and west of the brickworks site. High-sided vehicles using the proposed access road could be visible from small parts of the Foryd Bay Special Landscape Area, NW Fringes of Snowdonia SLA and

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Dinorwig historic landscape area at 3km distance. From locations at a distance of 0.5 to 2 km from the development boundary, the ZTV indicates that the plant would be visible from the elevated ground with slopes facing Seiont Brickworks. In Caernarfon, these areas include residential areas. To the east views are limited, by the A487 Bypass, to a number of scattered dwellings.

7.3 Summary of landscape and visual effects

- 7.3.1 The assessment reported in Appendix J concludes that there would be indirect effects of 'slight negative' significance on four of the twelve Landscape Character Areas under consideration.
- 7.3.2 Views of the proposed construction of the new access, and vehicle movements between the clay pit and the A4085 during construction and operation, would be available to dwellings on the south-eastern boundary of the Tyddyn Llwydyn and Glan Seiont Estates, and some properties scattered along the broad ridge between Caeathro and Bontnewydd. Properties on Seiont Mill Road would not experience a change in view, just the continuation of site activities and a reduced use of Seiont Mill Road for lorries.
- 7.3.3 No individual residences are predicted to experience a significant detrimental change to their view, other than Plas Treflan. The existing visual barriers are adequate for the proposed development, or the additional industrial elements introduced into views do not constitute a significant change in the view.
- 7.3.4 Plas Treflan would experience a major adverse impact which combined with medium receptor sensitivity, the proposal is assessed as having a large negative effect on the visual amenity. The proposed access would be a visual change, but seen against the backdrop of the new bypass embankment. This embankment will develop its cover of grass and tree planting over the coming years.
- 7.3.5 Views would be available from portions of the public rights of way in the area but in most cases the intervening landform or vegetation screen or filter the view so that the visual effect is of 'slight negative' or 'neutral' significance. Community facilities including St Peblig church and the Ysbyty Eryri – Bodfan complex would have no change in visual impact.
- 7.3.6 The proposed continued operations would continue to use lighting when working hours extend beyond daylight hours. The working hours would be the same as those given in Condition 20 of planning permission C17/0011/19/MW, ie 07.00 – 19.00 on Mondays to Fridays; 07.00 – 13.00 on Saturdays. The use of lighting within the site would therefore be at times when street lighting and other domestic lighting is in use, and so any visual impact from lighting would be insignificant. PIR controls and the selection of lighting types will follow guidance to mitigate effects on bats and other wildlife, as set out in section 8.
- 7.3.7 The potential cumulative visual effect of this proposal with that of the gas-fuelled standby electricity generating plant, proposed separately, has been considered. No significant effects of the combination of developments were found.

8 Ecology and Nature Conservation

8.1 European designated sites

- 8.1.1 Within a 5 km radius of the application site there are four European sites having features which could be affected by the project:

- Glynllifon SAC UK0012661 (5km distant). Feature(s): Lesser Horseshoe Bat
 - Menai Strait and Conwy Bay Special Area of Conservation (SAC) UK0030202 (1.5km distant)
Feature(s): 1110 Sandbanks which are slightly covered by sea water all the time; 1140 Mudflats and sandflats not covered by seawater at low tide; 1170 Reefs; 1160 Large shallow inlets and bays; 8330 Submerged or partially submerged sea caves
 - Abermenai to Aberffraw Dunes SAC UK0020021 (4.5km distant) Feature(s): 2110 Embryonic shifting dunes; 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes'); 2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes'); 2170 Dunes with *Salix repens ssp. argentea* (*Salicion arenariae*); 2190 Humid dune slacks; 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation; Transition mires and quaking bogs; 1395 Petalwort *Petalophyllum ralfsii*; 1441 Shore dock *Rumex rupestris*; Great Crested Newt *Triturus cristatus*
 - Glannau Mon: Cors Heli SAC UK0020025 (4.5km distant) Feature(s): 1130 Estuaries; 1310 Salicornia and other annuals colonising mud and sand; 1140 Mudflats and sandflats not covered by seawater at low tide; 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); *Spartina* swards (*Spartinion maritimae*); Vegetated sea cliffs of the Atlantic and Baltic Coasts
- 8.1.2 A Test of Likely Significant Effects (TLSE) report presented in Appendix K was prepared for these sites¹. This concluded that none of these European sites is close enough to the proposed development for there to be any risk of direct habitat loss or damage.
- 8.1.3 Two potential pathways for indirect effect were identified: waterborne, via the Afon Seiont; and airborne, through emissions of fugitive dust to the air. Each of these was considered in relation to each European site, taking account of fundamental interruptions to those pathways and the distances involved, as set out in the draft TLSE matrix which forms Appendix A to the TLSE report. In considering the dispersion of airborne emissions, the Menai Strait and Conwy Bay SAC was taken as proxy for the more distant Abermenai to Aberffraw Dunes SAC and Glannau Mon: Cors Heli SAC, as a 'worst case' value.
- 8.1.4 The draft Test of Likely Significant Effect has concluded that significant effects can be ruled out for the European sites and their listed features.
- ## 8.2 Ecological impact assessment
- 8.2.1 An Ecological Impact Assessment encompassing both the proposed operations for concrete batching, recycling and related activities; and the separate proposed STOR generating plant (see section 1.1 of this ES) was undertaken by Ecoscope Ltd, and the report is attached as Appendix L. The desk study reviewed surveys in the quarry conducted before the commencement of site works, concluding that these vary in quality and provide a restricted picture. Among these surveys, the Phase 1, Badger and Otter surveys and a significant effort focussing on bats provided a useful baseline for assessing the ecological impact of the proposals.
- 8.2.2 Records made in the 2015 breeding bird survey of the former quarry show the presence of 16 species including two 'Red List' and four 'Amber List' species. Number and species association is proportional to the location, but the conclusions on the number of nesting birds falls below what the field data suggests and indicates excessive caution in interpretation, which could have been rectified by a further survey (in line with modern recommendations). The assumption must be that more species bred in the former quarry than were recorded as doing so. No wintering bird surveys were

¹ Habitats Regulations: Test of Likely Significant Effects report for proposed operations at former Seiont Brickworks, Caernarfon. Jones Bros Ruthin (Civil Engineering) Co Ltd. August 2023.

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undertaken, but in the walkover survey for revised Phase 1 undertaken on 12th January 2023, Woodcock, Buzzard and Grey Wagtail were observed, and Dipper was recorded from the bridge to the brickworks yard on 24th January 2023.

- 8.2.3 The absence of accurate data on reptiles, and some potential flaws in the recording of amphibians in the reports reviewed, means that conclusions must be based on the likelihood of species being present rather than qualified evidence. Using that approach, based on former records, habitat quality and without additional survey of retained habitat, it was concluded that slow-worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*) and Grass Snake (*Natrix helvetica*) were very likely to have been present on site before the bypass works, and may still be present in retained habitat.
- 8.2.4 The majority of the proposed development occurs on land previously occupied by hard standing associated with the former brickworks or on previously excavated areas of the quarry. The proposed new access route largely follows the haul route used during the bypass construction but in places crosses former grazing land in the north-east corner which is within the site boundary.
- 8.2.5 The following potential direct impacts are recognised as a result of the proposals:
- Disturbance associated with Plant, lighting and construction;
 - Pollution: Potential impact of silt entering the Afon Seiont during construction;
 - Pollution: Emissions of fugitive dust leading to deposition on foliage of habitat associated with the Afon Seiont and nearby woodlands;
 - Noise pollution of Plant, with potential impacts on bat activity;
 - Light pollution and potential impacts to bats and Otter.
- 8.2.6 Without mitigation, the potential impact to Wildlife Sites and their Qualifying Features within 1 km is assessed as Negligible at a Local (SSSI) level.
- 8.2.7 Without mitigation, the combined development proposals are assessed as having a negative impact on Bats (all species), Otter, Habitat quality and ecological features of the Afon Seiont that is assessed as being Major on a Regional Level ('having an impact on a priority habitat or species distribution that may be significant in any of the individual countries making up the British Isles').
- 8.2.8 The report makes recommendations for mitigation that would reduce these negative impacts:
- Avoidance: not carrying out construction works on site at night, and maintaining a dark corridor along the Afon Seiont to avoid disturbance of otters, bats and migratory fish
 - Protection: using silt barriers and other techniques during construction, and directing any surface water drainage through settlement lagoons or vegetated linear water bodies, to protect the Afon Seiont from silty run-off. Testing to ensure water of high pH is not discharged to the river
 - Protection: avoiding or minimising noise produced from construction or the proposed development reaching the river margins, during hours of dusk/darkness when bats and otters would be active
 - Enhancement: planting specifically to create buffers for dust deposition into woodland and flowing watercourses
 - Mitigation: if security lighting is needed, use only 'wildlife-friendly' lighting designed to minimise spread of illumination and effect on bats.
- 8.2.9 Implementation of the strategy reduces the impact of the proposal to Minor at a Regional level.

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8.2.10 By reference to paragraph 5.2.2 this impact would apply to a receptor of 'Medium' value or sensitivity, and be of 'Minor' magnitude, leading to a significance assessment of 'Slight'. It would not therefore be a 'Likely Significant Impact' in EIA terms.

9 Noise

9.1 Noise scope

9.1.1 Concrete batching and materials recycling activities were previously conducted at the site under planning permission C17/0011/19/MW. Noise limits were adhered to throughout those operations, and no noise complaints have been received during the use of the site in that period. The current proposal is to continue those activities in the same location, and so no change in the character of noise arising from those activities is anticipated.

9.1.2 The chapter presents noise measurement data gathered by the specialist acoustic team at the site and surrounding receptors to establish the baseline condition, and at comparable concrete batching and rock crushing/screening operations to gain data for modelling. The distribution of noise from those operations was then modelled for comparison with measured background noise. To account for the possible approval of the separate STOR generating plant on an adjoining part of the site (see Chapter 1) the assessment assumes that the STOR plant could be established and operating, but is not part of the existing background noise.

9.1.3 Noise from HGV movements on the public highway is described under the chapter on Traffic generation, and so is not duplicated here.

9.2 Noise assessment

9.2.1 A specialist noise impact assessment was conducted and a report prepared by ITP Energised. That report, reference 6446 v1.0 dated 2023-12-04, is attached as Appendix M. The baseline noise survey showed that the appropriate daytime background noise level for assessment is 44dB at representative receptors NSR1 and 2, and 41dB at NSR3. Noise sources at this time were predominantly natural in origin, ie not industrial or road traffic.

9.2.2 Initial noise modelling indicated the need to enclose the crusher – screener to reduce the propagation of noise towards receptors. The applicant therefore decided to house this plant within a portal framed building matching the existing plant maintenance shed, to reduce noise so that the appropriate daytime threshold is not exceeded.

9.2.3 The predicted operating noise from simultaneous concrete batching operations and crushing-screening operations, taking account of the intermittent nature of concrete batching, meets or is 2dB lower than the criterion level at which a low adverse impact could arise at receptors.

9.2.4 The possibility of noise arising from the concrete batching and materials recycling operations arising in combination with noise from the separate proposed STOR generating plant has been considered. The noise impact assessment concludes that during combined operations the noise at receptor NSR 3 could exceed the daytime criterion level of 46dB by +2dB. The noise at receptors NSR1 and 2 would remain below the criterion. Although the three operations would very rarely, if ever, be carried out simultaneously the applicant has committed to preparing and working to a Noise Management Plan to avoid noise levels exceeding the criterion where low adverse impact could arise. Options for mitigation include arrangements to suspend crushing or concrete batching when the STOR generating plant is in operation.

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10 Traffic generation and effects

10.1 Traffic scope

- 10.1.1 The continued operation of concrete batching, materials recycling and other proposed activities at the site will generate HGV and light vehicle traffic. Further vehicle movements, estimated at 4 per working day on average, would arise in association with the B8 Storage and distribution use of part of the site.
- 10.1.2 The proposal includes the creation of a new permanent vehicular access from Waunfawr Road which would serve the site once constructed, along with the continued use of Seiont Mill Road. The existing haul route across the land would be formalised with hardstanding to provide an internal access road.
- 10.1.3 A 3m footway/cycleway is proposed along part of Waunfawr Road each side of the new access, and leading eastwards to a 2.5m wide footway/cycleway which would run under the bridge which forms part of the Caernarfon to Bontnewydd bypass. West of the new access point (ie towards Caernarfon), Waunfawr Road does not have a footway on either side.
- 10.1.4 A visibility splay of 4.5m x 70m in each direction would be provided at the new access from Waunfawr Road, achieving the required Stopping Sight Distance as shown in the Transport Assessment Report and drawings noted in Part A para 2.2.3. Improvements and alterations are also proposed to Waunfawr Road near the new vehicular access which would involve widening Waunfawr Road to provide a right-hand turn lane (ghost island) for vehicles travelling from Caernarfon.
- 10.1.5 A new access to serve the neighbouring property of Plas Treflan is proposed from the internal access road and the existing access to Plas Treflan from Waunfawr Road would no longer be used and would be stopped up.
- 10.1.6 The proposed new access from Waunfawr Road would serve to remove three existing access points; a previous agricultural access where the new access is proposed, vehicular access to Plas Treflan and the access to Seiont Quarry. The existing vehicular access from Seiont Mill Road would continue to be used for light vehicles, however, access to the site would now be shared between two access points; Seiont Mill Road and access from Waunfawr Road.
- 10.1.7 All light vehicles would utilise Seiont Mill Road access. It is expected that there would be between 10-15 personnel on site at any one time, in comparison with around 300 on site during the construction of the bypass. Therefore, there would be significantly fewer light vehicle movements utilising the Seiont Mill Road access than there were in the period when the bypass was being constructed.
- 10.1.8 The majority of HGV's would be directed to use the proposed new access from Waunfawr Road. Some HGV's travelling to the site from the A487 would need to utilise Seiont Mill Road if not suitable for the unsurfaced new access route. The number of HGV movements along Seiont Mill Road is not expected to be any greater than the number experienced during the use of the site in association with the construction of the bypass.
- 10.1.9 The expected number of traffic movements associated with the proposed development based on the applicant's expectations are set out below:
- Material brought in for recycling – assume 75,000 tonnes per annum, which would equate to 3,750 loads at 20t per load;
 - Material taken out after recycling – assume 75,000 tonnes per annum, which would equate to 3,750 loads at 20t per load;
 - Aggregate brought in for production of concrete – assume 18,000 tonnes per annum, which would equate to 600 loads at 30t per load;

- Cement brought in for production of concrete – assume 3,000 tonnes per annum, which would equate to 100 loads at 30t per load;
- Concrete for use – assume a volume of 10,000m³ per annum, which would equate to 1,667 loads at 6m³ per load;
- Workshop – assuming 10 vehicles per day, which would generate 2,780 movements.
- B8 Storage and distribution – assume 4 movements per day.

10.1.10 This totals 14,497 loads or 28,994 heavy goods vehicle movements (worst case assumes no ‘back-loads’ occur. Wherever possible, vehicles would carry a load on their return trips to reduce the numbers shown here).

10.1.11 A comparison between the previous HGV movements on Seiont Mill Road associated with the site (whilst used in connection with the Caernarfon to Bontnewydd bypass) in comparison to the expected HGV movements, primarily on Waunfawr Road, evenly distributed through the year is set out in Table 1.

Table 1 Comparison between existing and proposed vehicle movements at the site

Assumptions	Existing vehicle movements (in connection with use of site in relation to Caernarfon to Bontnewydd bypass)	Expected vehicle movements associated with proposed development
Total movements per annum	56,450 per annum	28,994 per annum
46 weeks per year	1,227 per week	630 per week
5.5 days per week	223 per day	115 per day
10 hours per day	22 per hour	11.5 per hour

10.1.12 These movements would be between both points of access to the site, but the majority of HGVs would use the access from Waunfawr Road.

10.1.13 Depending on the source of material, the delivery lorries would use routes towards Caethro roundabout and then use the A4085 to reach the proposed new site entrance and turn off the public roads. From the entrance they would travel into the quarry, observing the speed limits and other controls set by the quarry operator.

10.1.14 The quantity of traffic generated on public roads would be less than the threshold of change at which further consideration of air quality effects would be required under DMRB LA105 guidance for scoping. As set out in paragraphs 3.20 – 3.23 of the Screening Report (Appendix A), air quality effects from traffic have therefore been scoped out.

10.1.15 Paragraph 3.24 of the Screening Report (Appendix A) explains that the total vehicle movements per annum on the haul road would be substantially lower than the vehicles movements associated with the use of the site in connection with the Caernarfon to Bontnewydd bypass. Paragraphs 3.25 – 3.27 of that Screening Report demonstrate that traffic on Waunfawr road towards Caethro generated by the proposal is not likely to have a significant noise or vibration effect on receptors. Calculations using the Calculation of Road Traffic Noise method are presented in Appendix N. These calculations show that the traffic on Waunfawr Road generated by the proposal would add approximately 1.1dB(A) to

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the existing Basic Noise Level, and 1.5dB(A) during the busiest periods. By reference to DMRB LA111² Table 3.54a a short term noise change of 1.0 – 2.9dB L(A10, 18hr) is defined as ‘Minor’ magnitude, and Not Significant for the receptor.

10.2 Traffic effects on heritage sites

10.2.1 Traffic serving the proposed activities will use a dedicated access route that largely follows the line of the haul route used during construction of the bypass. These vehicles will be separated from possible heritage receptors at Bryn Eden and Grand Lodge to Glan Gwna Hall (see section 6) by the new embankment for the bypass which provides an effective visual and acoustic screen. Grand Lodge to Glan Gwna Hall lies behind a boundary wall alongside the A4085 from Caethro to the new site entrance. Bypass traffic is the dominant daytime noise source at those locations and so effects of the proposals on tranquillity at these heritage sites can be ruled out.

11 Drainage and the water environment

11.1 Location and flood risk

11.1.1 The location of the proposal site and access in relation to the River Seiont and its associated flood risk zones is shown in paragraphs 1.10, 1.14 and Figure 1.2 of the Screening Report (Appendix A). An updating of the Flood Consequences Assessment has been conducted specifically for this project, and the report is presented as Waterco ref 12421-FCA-03 in Appendix O.

11.1.2 The flood risk associated with the proposed development zones is set out in the report. It shows that part of the proposed development is located in the more elevated part of the site, outside the 0.1% annual probability flood extent (ie within Flood Zone A). For that part of the site ‘It can be concluded that site is flood free during all considered fluvial events up to and including the 0.1% AEP event. The risk of flooding from all other sources is very low. As such, no flood risk mitigation measures are considered necessary.’ ‘Less vulnerable’ elements of the proposal (the open storage B8 use) are located partly within the Flood Zone C and these have been assessed against TAN15 acceptability criteria within the Flood Consequences Assessment.

This text was prepared according to an earlier draft report prepared to meet the Scoping requirements.

NRW subsequently requested additional flood modelling to cover more extreme flood event and blockage scenarios including long-term climate change.

Text to be reviewed and amended when revised report available (Dec 2023)

11.1.3 The proposed site access road and Waunfawr Road are flood-free (paragraph 3.39). There is no ground raising within the extent of predicted flooding, and so no effect on the flood storage capacity of the floodplain.

11.2 Site drainage

11.2.1 Surface water within the application site drains by infiltration and possibly by surface or shallow sub-surface movement to the River Seiont. Rain falling on the remaining concrete slabs (dating from the former brickworks buildings) is shed locally onto permeable surfaces. The proposed new building

² Design Manual for Roads and Bridges LA111 Noise and Vibration Rev2 Highways England May 2020

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housing the recycling crusher will harvest rainwater for use in dust suppression and toilet flushing. The remaining drainage will continue to be via shallow infiltration through the aggregate surface, and lateral flow to the existing open ditch at the eastern edge of the former brickworks site. If necessary this ditch will be enlarged to provide additional storage capacity in extreme events. Any works would be carried out in accordance with a design approved by the Sustainable Drainage Systems Approval Body (Gwynedd Council).

11.3 Flood risk conclusion

11.3.1 For these reasons it is concluded that the proposed development complies with TAN15, would not be at unacceptable risk of flooding, nor would it increase the risk of flooding elsewhere.

12 Water quality

12.1 Water quality baseline

12.1.1 The development lies entirely within the catchment of the River Seiont. The river is classified under the Water Framework Directive (Cycle 3) as having overall 'Moderate' status (a decline from 'Good' status under Cycle 2). Its Ecological Status is 'Moderate', and its Chemical Status is 'High'. The ammonia (NH₃) status is also 'High'³

12.2 Potential effects from the development

- 12.2.1 The proposed continuation of operations at the site will not alter the current pattern of drainage nor the quality of surface run off. The concrete batching plant and crushing – screening plant used for recycling are mobile units which stand on the surface and do not require excavation for foundations. Simple foundations will be required for the proposed building to house the crusher. No other ground disturbance, other than shallow works to form the access point onto Waunfawr Road, is proposed and so there is no risk that any unknown ground contamination would be affected or mobilised to affect water quality.
- 12.2.2 No material with the potential to release silty or any contaminants would be stored within the area designated for B8 storage, unless fully contained to prevent silt washout.
- 12.2.3 Operations will continue to be managed under the existing Construction Environmental Management Plan, together with controls on the materials imported for recycling. These controls will be approved by NRW as part of the Environmental Permit for the site that will be required before importation of inert wastes can commence. Monitoring of site runoff and drainage, and reporting to NRW, will be a requirement of the Environmental Permit.
- 12.2.4 The temporary site offices and staff welfare accommodation established at the site for the bypass construction will remain in a reduced form. This accommodation would be connected to mains drainage and services, which will remain for the duration of the proposed continued use. There is no risk of discharges to the River Seiont.
- 12.2.5 Maintenance of plant and equipment within the designated area would be conducted to avoid pollution. Products and materials such as oils, lubricants and cleaning fluids would be stored in secure, bunded facilities in accordance with COSHH requirements. All works involving lubricants, fuels and other liquids would continue to be conducted under cover within the existing building, using drainage trays and equipment to capture any fluids for proper recycling or disposal.

³ [Water Watch Wales \(naturalresourceswales.gov.uk\)](http://naturalresourceswales.gov.uk) Cycle 2/ Cycle 3 comparison map, viewed 9.6.2023

- 12.2.6 The proposed new access from Waunfawr Road would be surfaced in bituminous material for at least 50m from the junction. Drainage from this impermeable surface would be discharged to a surface watercourse by connection to the existing Waunfawr Rd drainage system in agreement with the local highway authority. The remainder of the haul road would be constructed of unbound aggregate with cross-falls, so that rainfall would either infiltrate or shed to the adjacent quarry lands.

13 Cumulative effects with other projects

13.1 Other cumulative effects with the bypass

- 13.1.1 The bypass is now open to traffic and is considered as forming part of the baseline for the proposal. All effects identified in this assessment are therefore additional to the baseline including the bypass.

13.2 Cumulative effects with other projects

- 13.2.1 The separate but adjacent STOR project consists of a 20 MWe gas fired short-term operating reserve (STOR) plant (sometimes referred to as a 'Peaking plant') comprising ten natural gas-fueled engines and associated infrastructure. Paragraph 1.1.4 of this ES provides further detail.
- 13.2.2 Peblig Industrial Estate is an old estate alongside the Afon Seiont, which is now the subject of a planning application reference C22/0696/14/LL. This is a 'Full application for the demolition of existing industrial and commercial units and development of new industrial and commercial units (B1, B2 & B8) together with new road infrastructure, service yards and common areas, parking, flood meadow and landscaping on land at Peblig Industrial Estate'.



{Source: Gwynedd Council Track and Trace website}

13.2.3 The potential for cumulative effects arising should one or both of these projects be carried out in addition to the proposed concrete batching plant and other elements within this ES has been considered methodically, under each of the topic headings used within this ES. Topics scoped out of the assessment of the proposed concrete batching and other industrial activities were also scoped out of consideration for cumulative effects. The findings are presented in Table 2.

Table 2 Projects with potential cumulative effects

ES TOPIC	STOR CUMULATIVE	PEBLIG IE CUMULATIVE
6. Cultural Heritage	No effects from either development	Combined traffic increase (see 10) not sufficient to generate significant effect on heritage assets
7. Landscape and Visual Amenity	Negligible effect from each development independently, so additive effect is slight	Developments are separated visually due to location, so no cumulative effect
8. Ecology and Nature Conservation	Possible cumulative noise (see 9) during daytime hours Developments generate different emissions to air, with insignificant effects on vegetation, so cumulative effect on vegetation is unlikely Lighting of STOR plant only for security, so not cumulative with this development	Developments separated by distance so effects on Afon Seiont are the only consideration. Controls on water pollution apply to both sites, protecting water quality. Light scatter onto river corridor could form cumulative effect on riparian wildlife but careful design would avoid this.
9. Noise	There could be periods when both the concrete plant / materials recycling operations and the STOR were operating during daytime hours, leading to the combined noise at some receptors exceeding the agreed criterion. Management as set out in Chapter 9 would avoid that situation arising.	Developments are separated by distance so traffic would be the source of any cumulative noise. The noise arising from cumulative traffic generation on Waunfawr Road is assessed as +1.9dB over baseline, compared to +1.1dB over baseline for the Seiont development alone. The cumulative effect is not significant.
10. Traffic generation and effects	The STOR would not generate traffic once operational, so no cumulative effect arises	Peblig IE predicted to add 40 movements per hour to A4085, split equally to E and W of site. Seiont development predicted to add 12 HGV movements per hour to E of new access. The cumulative effect would be +7.3% of existing traffic.

11. Drainage and the water environment	The STOR plant sits outside the flood risk zone and has no permanent staff, so no cumulative effect arises	Peblig IE application confirms that surface water will be managed to avoid any increased risk of flooding downstream, and so no cumulative effect arises
12. Water quality	The STOR plant presents very low risk as lubricants are contained within the generator containers, and no liquid fuels are involved. No cumulative effect	Risks from pollutants within replacement industrial premises should be controlled by application of current legislation and regulation procedures, and is likely to be to higher standard of infrastructure than existing. No cumulative effect

14 Risk of disaster

14.1 Vulnerability to man-made incidents

14.1.1 The MPA concluded that there are no major installations in the vicinity of the site that could affect its operations. The operating area and haul route are sufficiently distant from the A487 bypass that they would not be affected by possible incidents involving highway traffic. The proposed development would not therefore increase vulnerability or risk from man-made incidents.

14.2 Vulnerability to natural disasters

14.2.1 The nature of the development is not particularly susceptible to natural disasters, as it involves operations with inert mineral materials, safely-stored fuel and similar products, and cement which would be fully contained within sealed silos.

14.2.2 As noted in section 11, the north western end of the site lies within a 'C2 Flood Zone' on the Seiont river floodplain. There is the potential of flooding in relation to operations in the B8 General storage area of the site as well as the potential need for staff evacuation, emergency services access or major accident response. Chapter 11 'Drainage and the water environment' presents the assessment of flood risk at the site, referring to a detailed flood assessment which concludes that only the margins of the area used for storage and staff parking would be inundated in a 0.1% annual probability flood extent (Flood Zone C). These 'Less vulnerable' elements of the proposal were assessed against TAN15 acceptability criteria within the Flood Consequences Assessment.

14.2.3 The provision for staff evacuation and for emergency services access in the event of an incident on site, or major accident on surrounding roads including the bypass, is set out in the site Emergency Plan. The proposed site access road and Waunfawr Road are flood-free. Formalising the highway access at Waunfawr Road and maintaining the haul road suitable for HGV traffic would provide an additional route for emergency access or site evacuation in the event of flood damage or risk to the Seiont Mill Road and river bridge. There is no ground raising within the extent of predicted flooding, and so no effect on the flood storage capacity of the floodplain. For these reasons it is concluded that the proposed site use would not be vulnerable to flooding disaster and would not increase the risk of such disaster to other neighbouring sites.

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14.3 Conclusion – risk of disaster

14.3.1 The magnitude of the impact of the proposed development on the risk of disaster is 'No change'. The significance is therefore 'Neutral' and not material in the decision-making process.

15 Conclusion

15.1 Conclusion to Environmental Statement

- 15.1.1 The applicant is seeking a new planning permission for changes to the site access and for use of the land as general storage (B8 use class), concrete batching plant area, recycling area, plant maintenance, associated weigh bridge and the siting of portacabins to be used as offices with associated parking and retention of workshop building, all on a permanent basis. The requirement for this Environmental Statement was determined at the Screening stage, and subsequently the scope was agreed through consultation with the MPA and consultees. The rationale for scoping is set out in section 1.4. The assessment has been conducted in line with that agreed scope, and has not been restricted by lack of information or other factors.
- 15.1.2 The ES presents the findings of the assessment in the context of the setting of the site, described in Chapter 3. The site lies on the south-eastern side of the town of Caernarfon, Gwynedd. The area is substantially the site of the former Seiont brickworks which comprised a brick clay quarry and brick production factory, more recently used as a temporary compound in connection with the Caernarfon to Bontnewydd bypass construction project. Alternatives, both 'Do Minimum' and seeking an alternative location for the proposed activities, have been considered but ruled out for reasons stated in Chapter 4.
- 15.1.3 Mitigation, in the form of operating controls and the design of the site layout, would reduce potential impacts identified during the assessment. This mitigation has been taken into account in the conclusions for each topic. No significant environmental effects from the proposed development, alone or in combination with other proposed development nearby (the STOR electricity generating plant or the Peblig Industrial Estate redevelopment) have been identified by the assessment.

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Appendix J- Landscape and Visual Impact Assessment

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Appendix K – Habitats Regulations: Test of Likely Significant Effects report

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Appendix L – Ecological Impact Assessment report

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Appendix M – noise report

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Appendix N – A4085 traffic noise calculations

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Appendix O –Flood Consequence Assessment

(placeholder – assessment report to follow)

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