

**R I C H A R D S**  
**M O R E H E A D & L A I N G L T D**

**TEMPORARY CONSTRUCTION COMPOUND  
AT SEIONT QUARRY CAERNARFON**

**TRANSPORT MANAGEMENT PLAN**

for

**Jones Bros Balfour Beatty Joint Venture**

December 2016

3030



# R I C H A R D S

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ENGINEERING, ENVIRONMENTAL and LANDSCAPE SPECIALISTS

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**SUMMARY OF KEY INFORMATION**

Aspect	Key information	Further information
<b>Site location</b>	Immediately south of Caernarfon and reached from the existing A487 Trunk Road at Pont Seiont.	Appendix A
<b>Indicative programme</b>	Based on current information (November 2016) a 30-month bypass construction programme.  Commencement in early 2018  Completion late 2020	Section 1.2
<b>Days of operation</b>	Monday to Friday each week, but not Bank Holidays.  Saturdays and Sundays when required.	Planning Application
<b>Working hours</b>	Monday to Friday: 7am until 7pm  Saturday: 7am until 5pm  Sunday 7am until 2pm	Planning Application
<b>Numbers of vehicles</b>	The typical working day entering and leaving:  Private cars: 76  Small delivery vehicles: 5  HGVs: 3	Section 2.2  See also the Environmental Statement Chapter 13
<b>Speed restrictions</b>	Ffordd Felin Seiont: 20mph  Within the site: 10mph	Section 2.4
<b>Prohibitions on construction vehicles</b>	Penybryn Road: no use by construction traffic  No parking or driving on verges along Ffordd Felin Seiont. Pedestrians and private vehicles to take precedence	Section 2.3  Section 2.5
<b>Deliveries</b>	HGV deliveries will be planned for off-peak periods in the day	

## 1 INTRODUCTION

### 1.1 Context

- 1.1.1 This Traffic Management Plan (TMP) has been prepared on behalf of the Jones Bros - Balfour Beatty Joint Venture ('the Applicant') in relation to the planning application for a development at the Caernarfon Brickworks Quarry ('the Development'). This TMP is appended to two separate planning applications which share some characteristics. The first application comprises a temporary construction compound and haul road, associated with the proposed A487 Caernarfon and Bontnewydd bypass; the second application also includes some permanent works including mineral extraction from the existing permitted quarry and then the restoration of the quarry void. This TMP does not address the full traffic requirements of the bypass construction, but only those aspects that arise from the proposed developments and activities in the quarry site.
- 1.1.2 The existing quarry access road and Ffordd Felin Seiont have been used by a wide range of vehicles, including rigid and articulated Heavy Good Vehicles serving the currently-permitted activities associated with quarrying clay and manufacturing and exporting bricks.
- 1.1.3 This document has been prepared to reflect comments received during a Pre-Application Consultation completed in November 2016.
- 1.1.4 A full environmental assessment, which includes a chapter on traffic impacts, is included in the Environmental Statements accompanying both applications.

#### *Site location*

- 1.1.5 The site is located at: Caernarfon Brick Quarry, Ffordd Felin Seiont, Caernarfon. The location is shown in the plan in Appendix A.

#### *Description of the traffic-related activities at the quarry site*

- 1.1.6 The most significant traffic impacts generated by the Development will occur during the construction of the bypass when all, or most, of the mineral extraction and restoration will occur.
- 1.1.7 Activity at the quarry site will be segregated into:
- A. construction site activity which will require construction vehicles to enter and leave the quarry and construction compound along haul roads that will climb the quarry sides to the bypass construction corridor;
  - B. compound servicing and the private road vehicles of the Applicant's site-based employees. These vehicles will enter and leave along the existing quarry access road and Ffordd Felin Seiont and the existing A487.

Activities 'A' and 'B' will be kept completely segregated. Vehicles entering and leaving 'A' will do so along the proposed bypass construction corridor.

- 1.1.8 All types of vehicles that will need to serve the construction compound will be able to do so along Ffordd Felin Seiont. The anticipated vehicle types required for bypass construction will be able to access the bypass site via separate access points along the route corridor, principally at either end.
- 1.1.9 A fundamental reason for submitting the application affecting the existing permitted clay quarry is to avoid the need for the import of good-quality construction fill, and the export of poor-quality soils to a suitable tip. If the quarry is not used for these purposes, a very significant number of HGVs carrying bulk fill will have to use local roads to obtain access to local quarries and landfill sites.

## 1.2 Indicative Programme

- 1.2.1 The proposed development will not proceed without the construction of the A487 Caernarfon to Bontnewydd bypass scheme. Any further activity within the quarry will commence only when Welsh Ministers announce that they intend to confirm the Orders to construct the bypass. The bypass Environmental Statement indicates that a construction period of 30 months is planned, with a start date for construction in early 2018. On that basis, the bypass would be completed around summer 2020. Factors that could affect this programme include the successful completion of the statutory processes, availability of Welsh Government funding and the formal signing of the contract to construct the works.
- 1.2.2 With a bypass construction commencement date in early 2018, it is possible that works to prepare the quarry site for use as a temporary construction compound, and for extraction and restoration, will commence in advance of this date. In particular, the task of pumping down the quarry sump, if required, would need to commence some weeks or even months in advance.
- 1.2.3 The construction compound would only be required for a period of less than five years, and probably for no more than 3 years. Extraction from the quarry would occur over the 30 months of bypass construction, while restoration of the quarry would be completed as soon as sufficient material has been imported to complete the task.
- 1.2.4 This TMP has been prepared before the planning application has been submitted, to demonstrate the Applicant's commitment to avoiding any unnecessary impacts on local residents and highway infrastructure. The information given is based on the reasonable worst case for construction vehicle traffic that can be established ahead of the final construction programme.

### 1.3 Days and hours of operation

1.3.1 See Summary of Key Data on page 1.

### 1.4 Updates to this TMP

1.4.1 The TMP will be reviewed and updated to reflect any changes to the scheme or local circumstances. Should there be any significant variation then this will be discussed with the Local Authority prior to the works commencing on site, and plans will be to reduce movements wherever possible.

1.4.2 The review and updating will be completed by the Principal Contractor, and agreed with Gwynedd Council, prior to construction commencing so that the document can then take account of:

- Final construction programme;
- The private journeys to and from home to be taken by individuals in the bypass workforce will be known and then the exact measures to reduce the numbers of car trips can be identified;
- Origins of all materials and plant will be better understood, and therefore the exact haulage routes to the site, on the public road network will be known;

## 2 CONSTRUCTION TRAFFIC MANAGEMENT

### 2.1 Routing of vehicles and site access

2.1.1 As set out in paragraph 1.1.6, all vehicles arriving at and leaving the quarry will be required to use prescribed routes which will be planned, where possible, to use good roads and avoid congestion and settlements. A key objective is to avoid HGVs driving through Caernarfon. Preliminary plans for routes to and from the scheme are set out in the Environmental Statement Chapter 13. Details of the chosen routes will be provided to site personnel, contractors and delivery drivers. The construction compound will be secured outside working hours.

### 2.2 Typical daily or weekly vehicles accessing the site

2.2.1 The traffic impact assessment in the Environmental Statement sets out the kind and number of journeys to and from the proposed construction compound using the Pont Seiont roundabout and Ffordd Felin Seiont. A summary of these journeys is set out in Table 1.

**Table 1 Typical daily and weekly journeys using Pont Seiont and Ffordd Felin Seiont**

Vehicle				Average	
Type	Examples	Frequency	Requirement	Daily	Weekly
Private cars	Site personnel, official visitors	Daily	Gradual build up over early period of construction period	76	530
Light good vehicles	Postal delivery, courier	Daily		5	30
Heavy Good vehicles	Sealed powdered cement delivery	Occasional	As deliveries are required to serve construction	1+	6
	Other			2	10
Abnormal loads	Plant delivery	Occasional			
	Site cabins	Daily	During first and last month of construction	4	20

## 2.3 Prohibited routes

2.3.1 Construction traffic will be prohibited from using Pen y Bryn Road.

## 2.4 Speed restrictions

2.4.1 All vehicles arriving from the bypass construction site along the haul roads and entering the 'working zone' of the construction compound and the quarry will be required to comply with the construction site speed limit of 10 mph. This speed will improve safety and reduce noise and airborne dust.

2.4.2 A speed limit of 20mph will apply to all delivery vehicles and site personnel in private vehicles arriving from the existing A487 roundabout at Pont Seiont, using Ffordd Felin Seiont and the private quarry access road. Temporary signs will be installed informing drivers of construction-related traffic.

## 2.5 Driver behaviour

2.5.1 The following rules will apply to construction and site traffic on Ffordd Felin Seiont, with temporary signs installed to inform drivers:

- Delivery vehicles will be planned to arrive and leave at previously agreed times;
- To avoid disturbance of residents on Ffordd Felin Seiont, vehicles will not be allowed to park on the private quarry access road to await opening hours;
- Vehicles will not be parked on Ffordd Felin Seiont, nor will they drive or park on the grassed verges;
- All construction vehicles on Ffordd Felin Seiont will give way to other users such as a group of walkers, horse riders, cyclists or another car unless unsafe to do so;
- No driveways on Ffordd Felin Seiont are to be blocked by construction vehicles, including large or abnormal loads, other than in an emergency or only for as long as required to allow another vehicle to pass.

## 2.6 Dilapidation and repair

2.6.1 A photographic record of the road will be completed as a record of condition in advance of any construction use. Regular inspections will be undertaken. The Applicant will be responsible for any damage to the Ffordd Felin Seiont caused by construction traffic. A maintenance and repair system will be implemented as necessary and agreed with the Highway Authority.

## 2.7 Small vehicles, light delivery vehicles and car parking

### *Private vehicles and working hours of site personnel and visitors*

2.7.1 Private cars will enter the site along the existing quarry access road. These vehicles will enter the construction compound car park in the 'clean zone' and will not proceed further into the site. The working days and hours for most personnel and periods of arrival and departure of most personnel are set out in Table 2.

### *Light delivery vehicles*

2.7.2 As for private vehicles, refer to Table 2.

### *Car parking*

2.7.3 A car park in the 'clean zone' of the construction compound will provide 52 spaces, which is considered sufficient for the private vehicles of site-based personnel, with 24 spaces for visitors. Six parking spaces are also provided for the use of disabled drivers. Pedestrian routes around the car park, and to and between the temporary cabins, will be provided. Facilities for storing of cycles will be provided.

**Table 2 Working days and hours**

Days of operation		Working hours	Site traffic peak		Rush-hour on public roads	
			Arrival	Departing	Arrival	Departing
Monday to Friday not Bank Holidays.		7am until 7pm	6.30-7am	6-7am	7-9am	4 – 6am
Occasional	Saturdays	7am until 5pm	6.30-7am	5-5.15pm	7-9am	n/a
	Sunday	7am until 2pm	6.30-7am	2-2.15pm	n/a	n/a

## 2.8 Heavy Goods Vehicles and Abnormal Loads

### *Contractors' plant and HGV delivery vehicles*

- 2.8.1 HGV deliveries will be required to use the quarry access road between the hours of 9am and 4.30pm during the week and between 09.00-13.00 on Saturdays, with no working on Sundays or Public Bank Holidays.
- 2.8.2 Construction traffic will be monitored and deliveries to the compound recorded. The Applicant will be required to implement and maintain a means to communicate with site HGVs using Ffordd Felin Seiont. Delivery drivers will be expected to give an estimated time of delivery within the agreed off-peak period so that arrivals and departures can be planned and coordinated to avoid peak hour congestion.

### *Abnormal loads*

- 2.8.3 The arrival or departure of abnormally large loads or slow vehicles will also be planned for off-peak periods of the day. The Applicant shall liaise with Gwynedd Council and the Police to ensure that all required approvals are in place to allow the abnormal load to travel on the public highway. If potentially inconvenient or disruptive construction traffic, such as delivery of large plant and equipment, will arise at a time when conflict could occur the Public Liaison Officer (PLO) will communicate with local residents, as soon as reasonable after the journey plan has been confirmed.
- 2.8.4 Abnormal loads will be subject to the use of banksmen who will meet the delivery vehicle at the exit from Pont Seiont roundabout and will remain with the vehicle until it has arrived in the compound. The banksman will also be present on departure.

### *Loading, unloading and HGV parking*

- 2.8.5 Sufficient area within the construction compound will be provided to enable HGVs to load and unload away from the public highway. Arriving HGVs will be directed to the appropriate location within the yard where unloading or loading will be completed.
- 2.8.6 The number of HGVs associated with construction traffic is not large and is within the capacity of the road network. However, to avoid congestion at peak periods the programming of HGV movements will be subject to careful planning.

## **2.9 Pedestrian and other Non-motorised users**

### *Footways*

- 2.9.1 Pedestrians and cyclists are likely to be present on or adjacent to public roads and using public footpaths. There are footways beside the A487 from the centre of Caernarfon to around the Seiont roundabout, and these extend along Ffordd Felin Seiont to the Public Park and as far as the pedestrianised old Pont Seiont. South of the old bridge, Ffordd Felin Seiont narrows between walls and continues for around 85 metres without verges or footway. A hard-surfaced footpath bypasses this narrow length, using section of the Lon Gwyrfaï Cycleway. South of the walls, Ffordd Felin Seiont widens and has a variable width verge on the west side. The narrowest length of this road lies to the south of the point where the quarry access road branches to the east. Construction traffic will use the quarry access road.

### *Public footpaths (shown on Figure 12.1 in the Environmental Statement)*

- 2.9.2 There are no public footpaths within the existing quarry site. Footpath 13 extends along the west bank of the River Seiont from the A4085 Constantine Road in the north-east, passing under the private quarry access road and then continues southwards for a short distance on the other side to meet Ffordd Felin Seiont. This is a well-worn route with paths linking to the hospital grounds and Tyddyn Llwydyn. Information on other public footpaths is shown in Figure 12.1 in the Environmental Statement.

### *Cycleways*

- 2.9.3 National Cycle Route 8 extends south along the railway line from the centre of Caernarfon to pass close to the A487 at Pont Seiont Roundabout. At this point Lon Gwyrfaï cycleway branches off to pass under the A487 and then join Ffordd Felin Seiont. It then crosses the old Pont Seiont, continues southwards along the side of the A487 for approximately 160 metres and then turns east along Penybryn Road to continue south eastwards towards Waunfawr. There is no conflict with these routes.

### *Within the construction compound*

- 2.9.4 Designated pedestrian and vehicles routes will be clearly set out within the compound and strict site safety rules, including a 10mph speed limit, will apply. Safe pedestrian routes are provided to allow safe walking from the car park to the site office entrance. All personnel and visitors will be required to take the Site Safety Induction training before entering the working areas of the compound and site. All personnel must wear the required Personal Protection Equipment including high-visibility clothing.

## **2.10 Site management**

### *Wheel wash facilities*

- 2.10.1 The driver of any vehicle requiring access to the bypass construction site, or the 'working zone' of the compound, will be required to request entry and egress through a secure gate and on departure will be required to ensure the vehicle is fit to use the public road network.
- 2.10.2 A wheel wash and a pressure washer, with manual brushing facilities, will be provided on site. After each vehicle has left the site, the road will be checked and cleared if required. The situation will be monitored, and assessed to determine if a road sweeper is necessary to ensure the public highway remains reasonably clear of mud and grit during the works.

## **2.11 Incident Management**

- 2.11.1 In the event of any incident involving a construction-related vehicle on Ffordd Felin Seiont the following procedure will be followed:
- a full photographic record of the incident will be made;
  - the driver will report the incident to the main site office at the first opportunity;
  - the owner of any property that is affected will be contacted;
  - a representative of the applicant will contact the affected property owner as soon as is possible in order to visit the site and wherever possible agree a method and programme for making any required repairs.

## **2.12 Travel planning and monitoring of traffic movements**

- 2.12.1 The Contractor will keep a full and complete record of all vehicle movements into and out of the construction compound from the public road. These records shall be held for the full duration of the contract and will be available for inspection. The Applicant will provide advanced notice of planned abnormal loads to Gwynedd Council.

## 2.13 Travel Plan

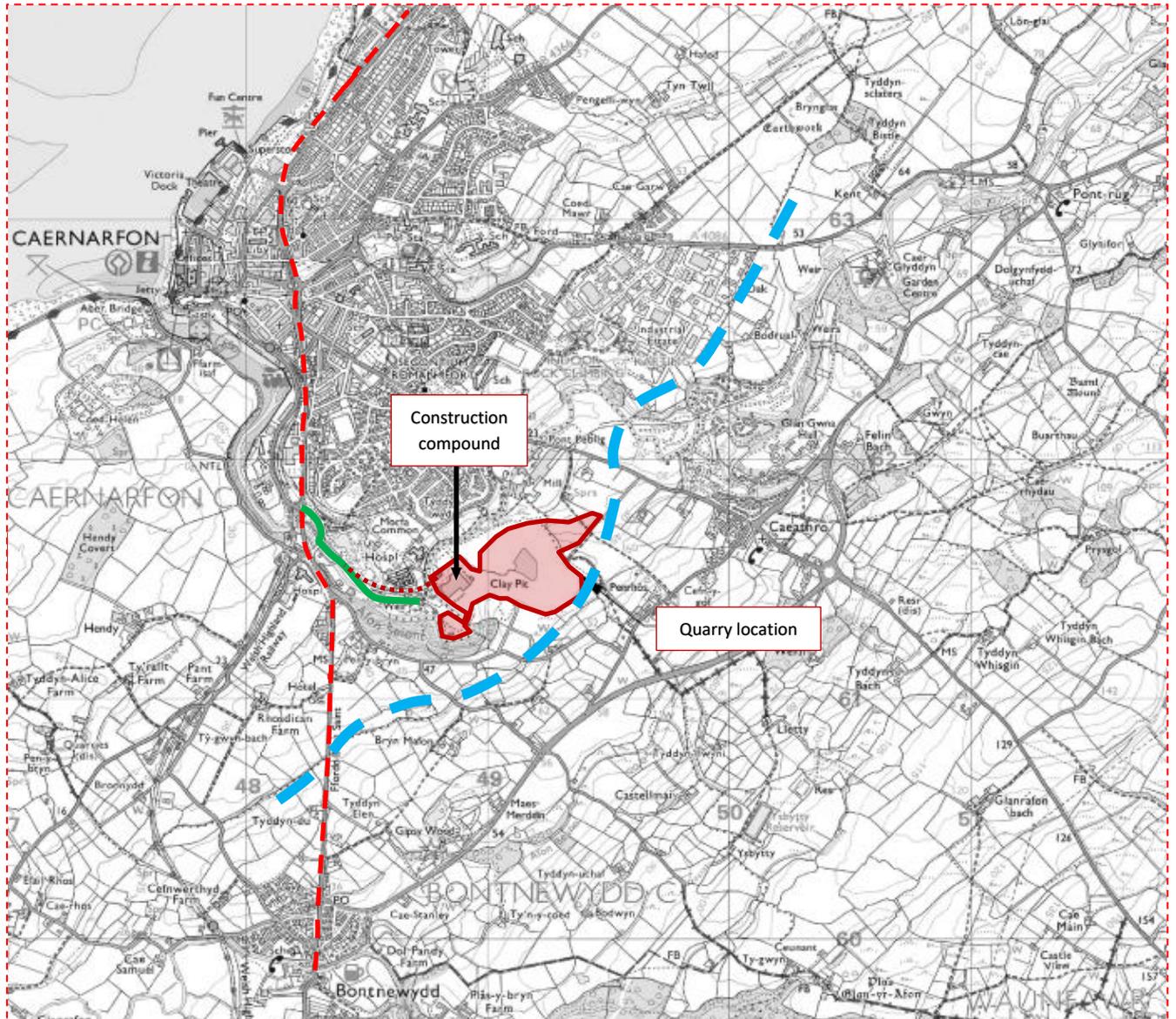
- 2.13.1 Prior to the opening of the development a Travel Plan would be submitted and agreed in writing with Gwynedd Council. This document would aim to promote alternative modes of travel to the single occupancy car trip for employees as part of their journey to work.
- 2.13.2 The TP would be a “living” document: it would be reviewed annually following new employee travel-to-work questionnaires, and a new report would then be agreed with Gwynedd Council.



# APPENDIX A

## Compound and bypass access routes

### 1. Location and context plan



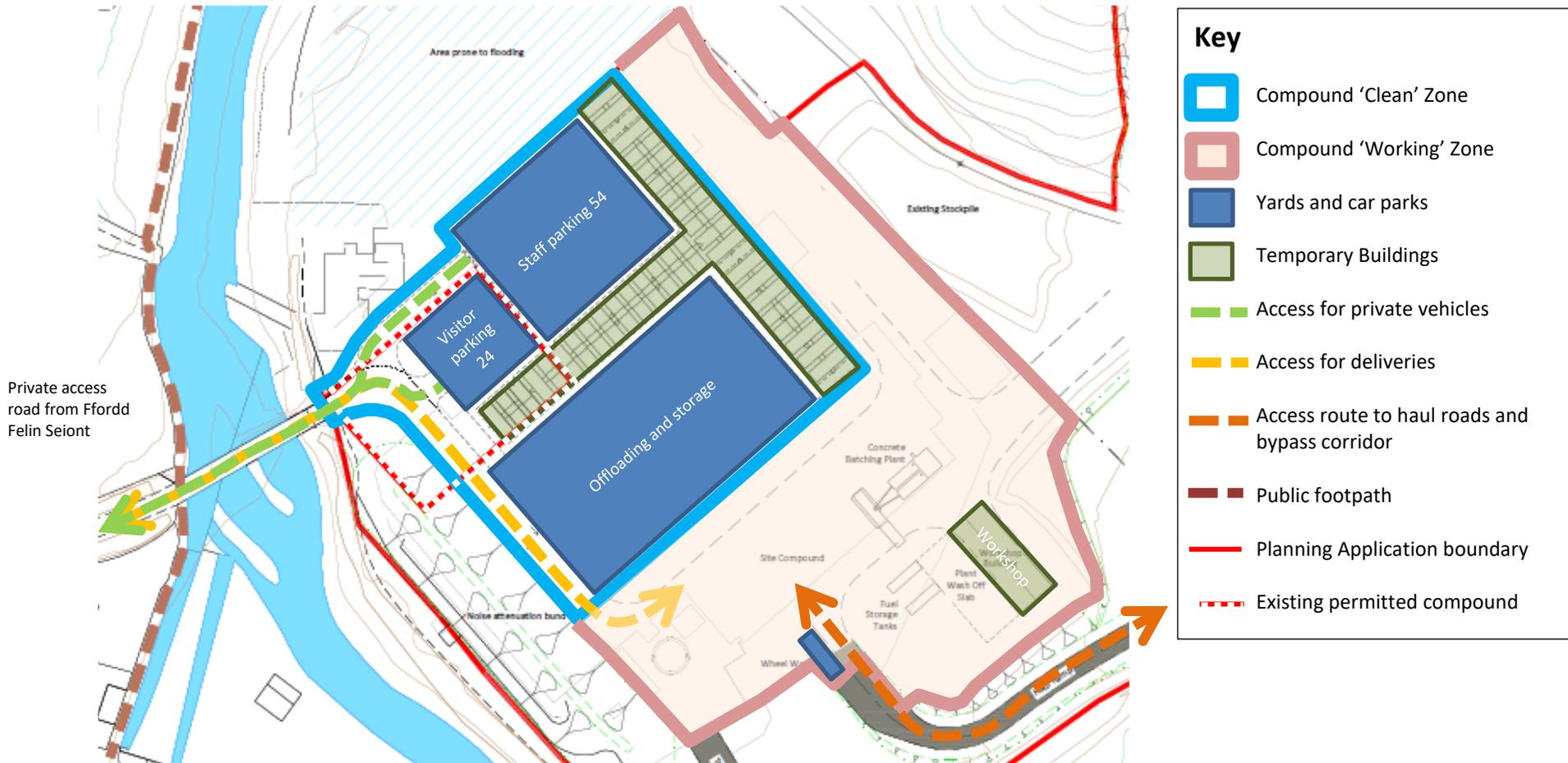
**Key**

-  Existing A487
-  Proposed A487 Caernarfon to Bontnewydd Bypass (part)
-  Ffordd Felin Seiont
-  Private Quarry Access Road

### Location and context plan

Not to Scale

## 2. Layout of Construction Compound



### Layout of Construction Compound

Not to scale

