

3.5 MW SOLAR FARM

Brookbarn Farm Courtwick Lane, Wick, Little Hampton, BN17 7PE

Director of Operations	Gary Hales	
Issue number:	01	Date: 29 th May, 2015
Produced by:	Carl Sykes	
Approved by:	Gary Hales	
Issued to:	Paul Lipinski	

Review record

This plan will be reviewed against the construction works and at least monthly to ensure its relevance.

Date	Revision / section	Signature
13.11.14	Initial Plan	Carl Sykes
29.05.15	Revision in line with planning conditions and new layout drawing	Carl Sykes

Contents

1. Introduction
2. Scope of works
3. Planning conditions
4. Vehicle movements (construction deliveries)
5. Vehicle movements (construction site staff)
6. Car Parking for Construction Staff
7. Directions to site
8. Delivery restrictions
9. Directions on site
10. Safe use of vehicles and plant on site
11. Site access and segregation for vehicles and pedestrians
12. Operational Phase

Uncontrolled if printed

1. Introduction

This document has been prepared to aid in the mobilisation and subsequent traffic both vehicular and pedestrian to and on the site throughout the entire project.

2. Scope of works

The project is for the installation of a 3.5 - mega watt ballasted ground mounted photovoltaic solar farm that is due to start 27.07.2015 and will comprise of 13,200 PV modules, 33 sub collectors, 100 invertors associated frame work as well as GRP houses and two transformer bases.

It is sited on an existing field that has been used for grazing purposes and animal feed production. The field is situated on top of a disused landfill site and therefore no ground penetration is allowed in this area.

Old Mead Road will be conditioned surveyed prior to the site going live to ascertain its condition; this will be compared to another taken at the end of the works with remedial works being undertaken as necessary though the site team will monitor this throughout the job.

There will be enabling works to ensure that construction can be undertaken safely and with minimal effect on the surrounding environment and infrastructure.

This will include some stabilisation of the ground for the track way and welfare/car parking/turning areas.

These stabilised areas are created by using terra firma like ground mats which will not disturb the ground.

Trench work outside going south where the 11kv cable will run for 3.2km where it will be connected to a sub station in Littlehampton.

Drainage and landscaping along with the 2.0 metre high deer fencing and beam security will also be installed with extra fencing to protect the trees as well as secure the site.

The site will be sewn in March, which is the next available sewing season for grass after the construction install.

This will be undertaken by a tractor and power harrow when no other personnel are present. This will be set to a shallow depth where only the top soil is disturbed.

The site covers an area of approximately 12 acres of fields and is approximately 1.75 miles by road to the north of Littlehampton.

3. Planning conditions

The following traffic planning conditions apply to this project and have been stipulated by Arun District Council Application Ref: LU/385/14/PL

Condition 7: Works of construction or demolition, including the use of plant and machinery, necessary for implementation of this consent shall be limited to the following times: - Monday-Friday: 08.00hrs-18.00hrs - Saturday: 08.00hrs-13.00hrs - Sundays and Bank Holidays: no work permitted.

Reason: To safeguard the amenities of nearby residents and to accord with policies GEN7 and GEN32 of the Arun District Local Plan.

Condition 10: Access to the site shall be from Old Mead Road only, in accordance with detailed plans to be submitted to and approved by the Local Planning Authority after consultation with the Highway Authority. Thereafter, it shall be retained for its intended purpose.

Reason - To ensure fit-for-purpose access constructed to appropriate design and safety standards and to control traffic movements in and out of the development site in accordance with policy GEN7 of the Arun District Local Plan.

Condition 11: No development, hereby approved, shall be occupied until provision for parking, turning, loading and unloading of vehicles associated with the development clear of Old Mead Road and any adopted highway has been provided in accordance with plans to be submitted to and approved by the LPA after consultation with the CHA. Provision should thereafter be maintained solely for the purpose of the parking and turning of vehicles clear of any adopted highway and Old Mead Road.

Reason - To ensure that adequate provision for the parking and turning of vehicles is provided for the development in accordance with policy GEN7 of the Arun District Local Plan.

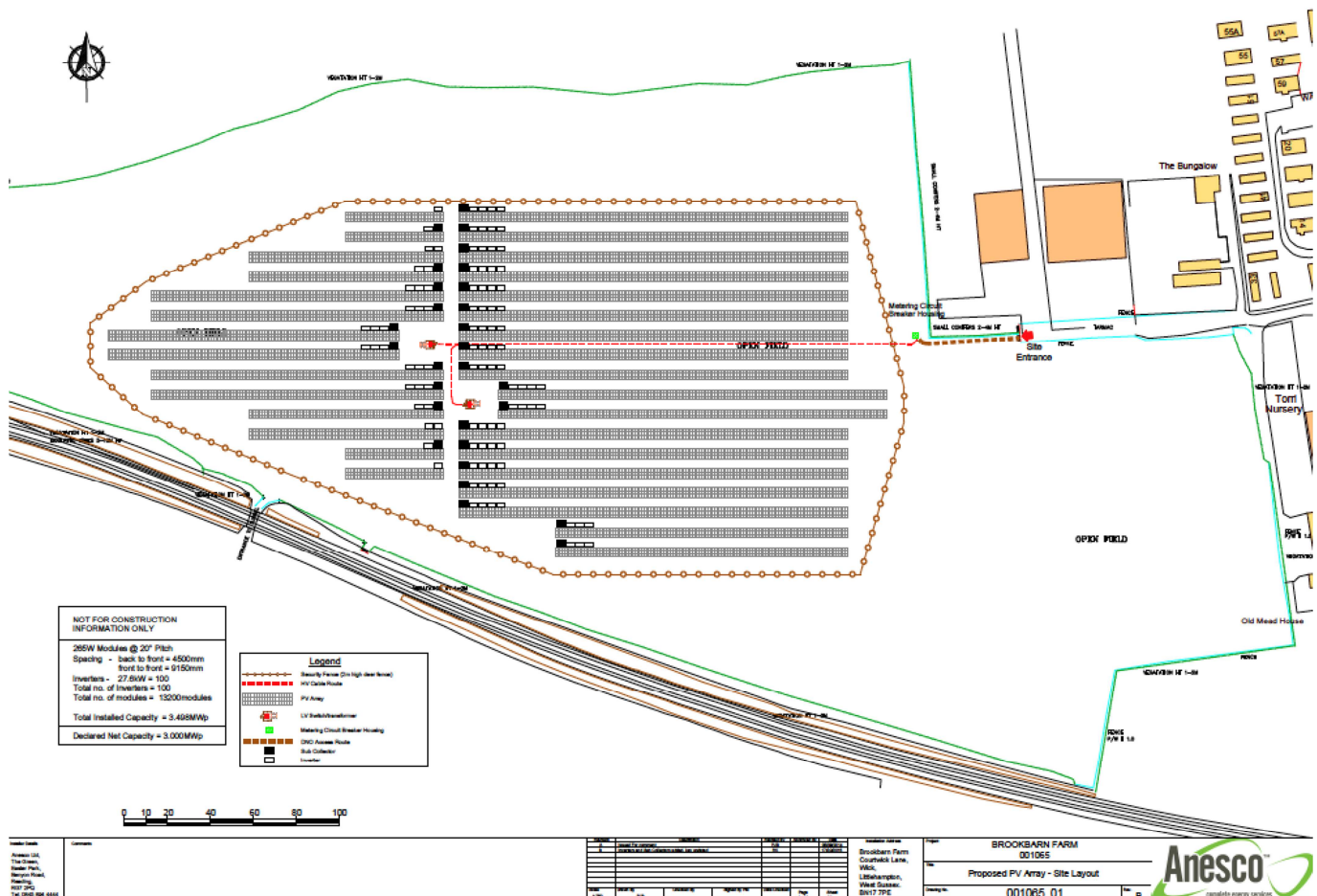
Condition 12: Prior to development commencing, a Construction Management Plan shall be submitted to and be approved in writing by the Local Planning Authority after consultation with the Highway Authority. This shall require

the applicant and contractors to minimise disturbance during both the construction and demolition phases of the development and will include (but not be limited to) details of the following information for approval:

- the phased programme of construction works;
 - the means of access and road routing for all construction traffic associated with the development;
 - provision of wheel washing facilities and details of their operation and location;
 - Details of street sweeping;
 - construction working times including delivery times;
 - details of a means of suppressing dust arising from the development;
 - details of all proposed external lighting to be used during construction;
 - details of areas for the loading, unloading, parking and turning of vehicles associated with the construction of the development;
 - details of areas to be used for the storage of plant and materials associated with the development;
 - details of the temporary construction site enclosure to be used throughout the course of construction (including access gates).
 - Contact details for the site contractor, site foreman and CDM co-ordinator (including out-of-hours contact details).
 - Evidence of consultation with neighbours prior to works commencing.
 - Details of any temporary traffic management that may be required to facilitate the development including Chapter 8 traffic signage.
 - Commitment by the applicant to any road repairs (as may be identified) at junction of Old Mead Lane with A284 Lyminster Road and to Old Mead Road itself (will require before and after survey of said roads). A Section 59 Agreement may be necessary for parts of the adopted highway network - WSCC can advise on request.
- Details of how measures will be put in place to address any environmental problems arising from any of the above shall be provided. A named person shall be appointed by the applicant to deal with complaints, shall be available on site and their availability made known to all relevant parties.

Reason - To ensure safe and neighbourly construction in the interests of amenity/road safety in accordance with policy GEN7 of the Arun District Local Plan.

Pic.1 - Location Plan RevB



4. Vehicle movements (construction deliveries)

- Deliveries will be on 40t HGVs (Pic.2). All deliveries will be coordinated to be “Just in Time” to control traffic flow. They will be asked to pull up away from the site and call ahead to ensure that the way is clear and that no other vehicles are present that may create a traffic issue. They will be required to reverse on to site with the use of a banksman.
- The PV panels and frames will be shipped in 40ft containers which are typically carried to the site on a 15.4m long articulated vehicle. This is the largest vehicle which will access the site. Typical dimensions for a 15.4m long articulated vehicle are:
 - 15.4m long;
 - 2.5m wide;
 - 3.65m high; and
 - approx. 11.2 tonnes unladen (15 tonnes with shipping container).
- The site will comprise of 13,200 PV modules. Anesco confirm that each PV module weighs approximately 0.018 tonnes and that a total of 812 panels can be accommodated per delivery vehicle. This equates to a total load weight of 15.5 tonnes, and a gross vehicle weight of approximately 30.5 tonnes. The proposed deliveries will therefore not weigh the maximum legal limit of 40 tonnes.

Pic.2



Heavy Goods Vehicle Movements – Construction Period

Table. 1

<u>Activity</u>	<u>Type of Vehicle</u>	<u>Total Number of Deliveries</u>
Modules	15.4m Articulated	17 (34 two-way movements)
Compound matting	15.4m Articulated	2 (4 two-way movements)
Frames	15.4m Articulated	6 (12 two-way movements)
LV/HV cable	15.4m Articulated	4 (8 two-way movements)
Inverters	15.4m Articulated	1 (2 two-way movements)
Transformers and GRP's	15.4m Articulated	3 (6 two-way movements)
Miscellaneous including skips	Various	8 (16 two-way movements)
Welfare units	15.4m Articulated	10 (20 two-way movements)
Plant	15.4m Articulated	2 (4 two-way movements)
Fencing	15.4m Articulated	8 (16 two-way movements)
Ducting	15.4m Articulated	1 (2 two-way movements)

TRAFFIC MANAGEMENT PLAN

Ballast

15.4m Articulated

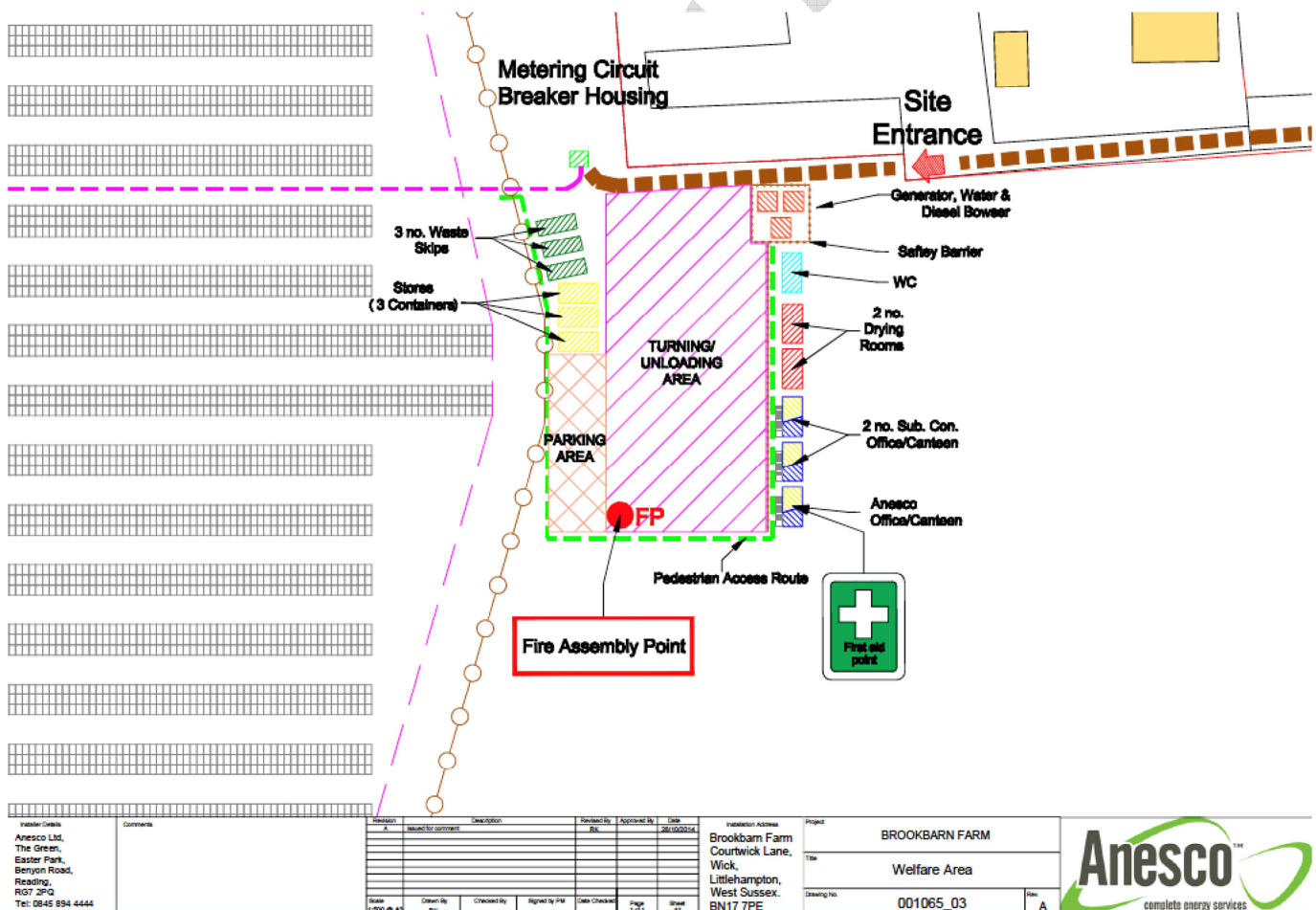
12 (24 two-way movements)

TOTAL

73 deliveries (146 two-way movements)

- Table 1 above demonstrates that there will be up to a total of 73 deliveries to the site. This equates to approximately 1.21 deliveries per day on average over the 10 - week (Monday to Saturday) construction phase.
- In addition to the HGV movements identified in the table, there may also be a small number of construction movements associated with smaller vehicles such as the transport of construction workers and sub-contractors.
- There will be no need to reverse on to site as HGVs will drive on to and off of site in forward gear as they can turn within the turning area on site (see pic 3).
- The site team will check on the condition of Old Mead Road and put forward suitable remedial action
- There will be no contact with muddy/dirty ground as all delivery vehicles traverse the hard standing (terra firma matting) and therefore none or very little debris should be tracked out on to Old Mead Road, with no field plant tracking on to Old Mead Road outside. There will be road sweeping supplied by Tardis Environmental UK and wheel washing services available to us should the need arise that would be placed next to the bowser area.

Pic.3 Parking and welfare layout



5. Vehicle movements (construction site staff)

- There will be up to fifty operatives on site at the busiest time therefore to reduce traffic onto site all operatives are encouraged and most do share vehicles.
- Where possible labour will be resourced locally

6. Car Parking for Construction Staff

- The parking of vehicles is permissible on the car parking by the welfare area. There may be some space made available elsewhere on site for vans if there is a requirement but the project manager will decide this.

7. Directions to site

- The development is well connected to the national highways network, which enables straightforward transport of materials, equipment and labour.
- The preferred route for construction traffic is via Old Mead Road off of the A284 (see pic.4).
- The haulage companies and contractor(s) will be advised to time their arrivals where possible and not to arrive before 09.30 in order to minimise impact on the local highway.
- Where appropriate, Anesco will make reasonable endeavours to contact residents and businesses in the area and reach an agreement to keep the access routes as free of traffic as is possible during the hours of operation, in order to maintain safe and efficient access to and from the site.
- The surrounding roads are already subject to use by tractors and industrial vehicles. Therefore it is considered suitable for use by the anticipated number of HGVs that will be associated with the temporary construction period. The likelihood of background traffic being delayed significantly is low.
- Anesco will put in place measures to minimise the likelihood of background traffic meeting an HGV associated with the construction phase on this route (see Pic.4). This would comprise:
 - As soon as is possible after leaving the motorway the HGV driver is to telephone the solar farm to inform them of its location calling either:
 - The site manager – TBA
 - The site supervisor – TBA

Directions:

From the West (Southampton)

Postcode BN17 7PE

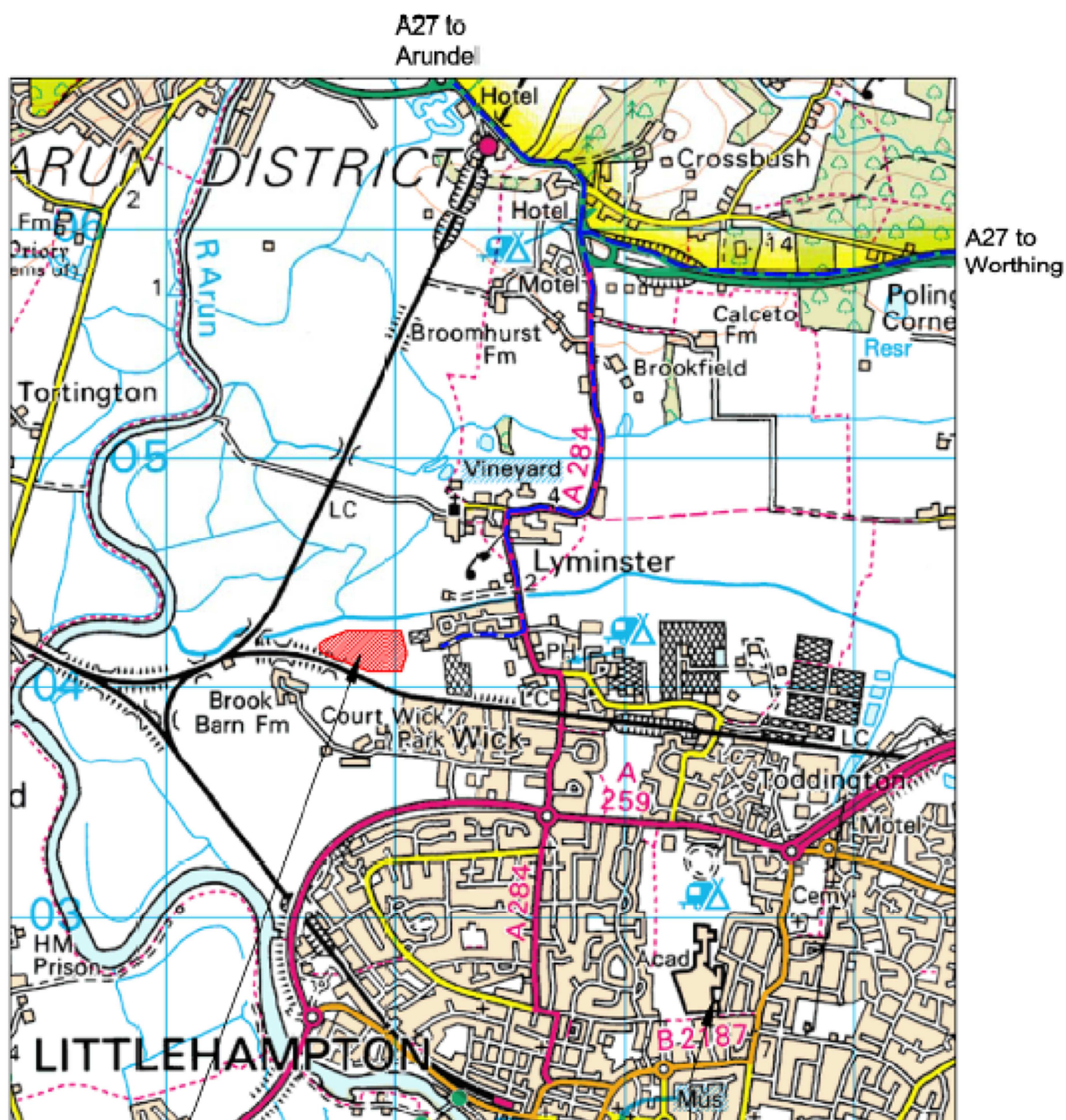
- M271 on to the M27 Portsmouth
- A27 Chichester, Arundel, Brighton
- A284 to Littlehampton for 1.2 miles
- Right turn on to Old Mead Road
- Follow Anesco signs
- Site entrance at the end of the road
- Welfare and drop down area is on the left

From the East (Felixstowe)

- A14 to A12
- A12 to M25 to Gatwick
- Leave M25 at junction 7
- M23 Brighton/Gatwick
- A23 Brighton
- A27 towards Arundel/Portsmouth/Southampton
- A284 to Littlehampton for 1.2 miles

- Right turn on to Old Mead Road
- Follow Anesco signs
- Site entrance at the end of the road
- Welfare and drop down area is on the left

Pic. 4 Traffic route



Site
Location

--- Access Route
 Site Location

8. Delivery restrictions

- During the construction phase of the development construction deliveries will arrive at or leave the site between - Monday-Friday: 08.00hrs-18.00hrs - Saturday: 08.00hrs-13.00hrs - Sundays and Bank Holidays: no work permitted
- There is a strict 5mph speed limit on site
- Only one HGV is allowed on site at any one time and these will enter in forward gear and exit the site in forward gear
- Articulated vehicles coming to site are to park up and call ahead for authorization on to site. The site numbers are:
 - The site manager – TBA
 - The site supervisor – TBA
- Once through the entrance (Pic.3) drivers are to pull up to the turning area and report to the site office

9. Directions on site

- All vehicles are to follow the Anesco site and road management signs and stay within the 5mph speed limit
- Lorries are to come to site and proceed to the turning/unloading area with the use of a banksman before being off loaded by use of the excavators with fork attachments where stock will be placed on the put down area
- Whilst unloading is taking place no personnel will be permitted to work in the area
- Skips are placed next to the turning/unloading area where waste carriers can easily access them, this will be done with a banks man present
- The welfare area will have pedestrian and vehicular routes leading to and from it and have signs noting this
- Depending on what phase the build is in will determine the pedestrian and vehicular routes but they will be signed
- Where possible alternate arrays will be used for vehicles allowing every other array for pedestrians
- Pedestrian areas within the welfare area are separated from plant with the use of herras fencing and the line of welfare cabins

10. Safe use of vehicles and plant on site

- Only tracked vehicles are allowed to traverse the grassed areas
- All vehicles are to be legally parked, operated by trained, competent, authorized, licensed and insured personnel
- When reversing where others are present a banks man will be used
- The vehicles will be serviced and kept to a road/work worthy state through regular inspections
- The Safe Working Load of any given vehicle will be adhered to
- The service road has a maximum speed limit of 5mph
- Whilst not on the service road the maximum speed limit is 5mph
- Traffic management signs will be displayed throughout and outside of the site
- No muddy/dirty plant is to traverse outside of the site before being washed down or having road cleaning facilities on hand
- All plant is to be stored safely in the compound and left locked when not in use

- Fuels are to be stored within the fuelling area/diesel bowser where they must be stored in double skinned bunded tanks with drip trays and spill kits. Fuelling is prohibited elsewhere on site.
- No ground penetration is permitted

11. Site access and segregation for vehicles and pedestrians

- Vehicles to only be parked in designated parking area
- Keep the road accessible for the safe egress/access of pedestrians and road users including the emergency services
- All pedestrians and vehicle users are to be extra vigilant around any cross over areas
- Herras, pins and bunting will be used for segregation
- The general public will be using the Old Mead Road therefore fencing and adequate signs noting the hazards will be displayed as well as ensuring this is covered during induction

12. Operational Phase

- Once operational, there will be a visit by Anesco every 21 days for maintenance/survey purposes and will be undertaken in a transit like van.
- Whilst Anesco's compound will have been removed, the turning/unloading area will be left for vehicles to access the compound and be able to turn around to ensure that reversing will not occur on the track way.