

**WYRE BEACH MANAGEMENT SCHEME
CONSTRUCTION MANAGEMENT ENVIRONMENTAL PLAN**
CRMMS026/CEMP 1 Rev 1



Revision	Date	Details	Signature
0	21/5/21	Issue to Wyre CC	
1	24/08/21	Review and updated with Balvac Noise Plan	

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1.0 INTRODUCTION

The scope of Phase 1 works involves excavating below beach level in front of the existing sea defences and placing new 3-7 tonne graded rock armour revetment in a two layer thick arrangement. The new rock armour provides; scour protection to the existing sea defence structure, encourages the deposition and accretion of beach deposits close to the existing structures and reduces the risk of flooding due to undermining and subsequent breach of the existing defences

The works are located on the coastline in Lancashire between Cleveleys and Fleetwood; commencing from the Café Cove on the promenade to an area known as the tank traps south of Rossall School. The compound and storage areas will be located within Jubilee Garden's carpark and park

This management plan will provide details and the control measures used to either eliminate or mitigate including public interface and liaison for the key areas of concern raised in the planning application.

2.0 WORKING HOURS

Monday to Friday 08:00 until 18:00
Saturday 08:00 until 13:00

No work completed outside these hours or Bank Holidays

3.0 PUBLIC INTERFACE AND COMPLAINT PROCEDURE

Key to the success of the scheme will be the interface with the public, informing them of the works. The project team have been selected in order to maintain the excellent public relationship developed at the Rossall Scheme where the scheme received a silver award at the National CCS site awards

3.1 Information

- Letter drops including detailed updates and key public interface including items such as Christmas shutdowns.
- Monthly updates provided on noticeboards.
- Highway advance warning signs of closures/roadworks
- The public liaison officer appointed will be Jane Littlewood of Rabbit Patch with a room set up as a visitors' centre open one day a week within the Venue hotel with Jane in attendance
- Scheme updates provided jointly between Wyre CC and Balfour Beatty available on internet updated monthly to a dedicated scheme web site.
- During permeant works construction -Open mornings where the construction team provide a presentation to members of the public
- 24-hour contact number and manned out of hour's security.

3.2 Site Appearance

- External areas of the site kept clean and tidy. Litter picks regularly carried out with daily inspections by staff.
- PPE a key consideration, with a strict dress code in place. Subcontractors allowed to wear their own branded PPE.
- Separate smoking and vapour shelters provided for the workforce within the compound
- Company and corporate values and a positive industry image promoted via the site website with regular updates.
- Conduct and behaviour addressed at the site induction and with regular toolbox talks, visitors' PPE and briefing and an open door policy.
- Compound to have solid hoarding around the area ,clean presentable and painted in corporate colours
- Contract to be registered with Considerate Constructors Scheme -Posters to be displayed with contact numbers
- Highways cleaned as required
- Site vehicles cleaned and presentable

3.3 Complaints

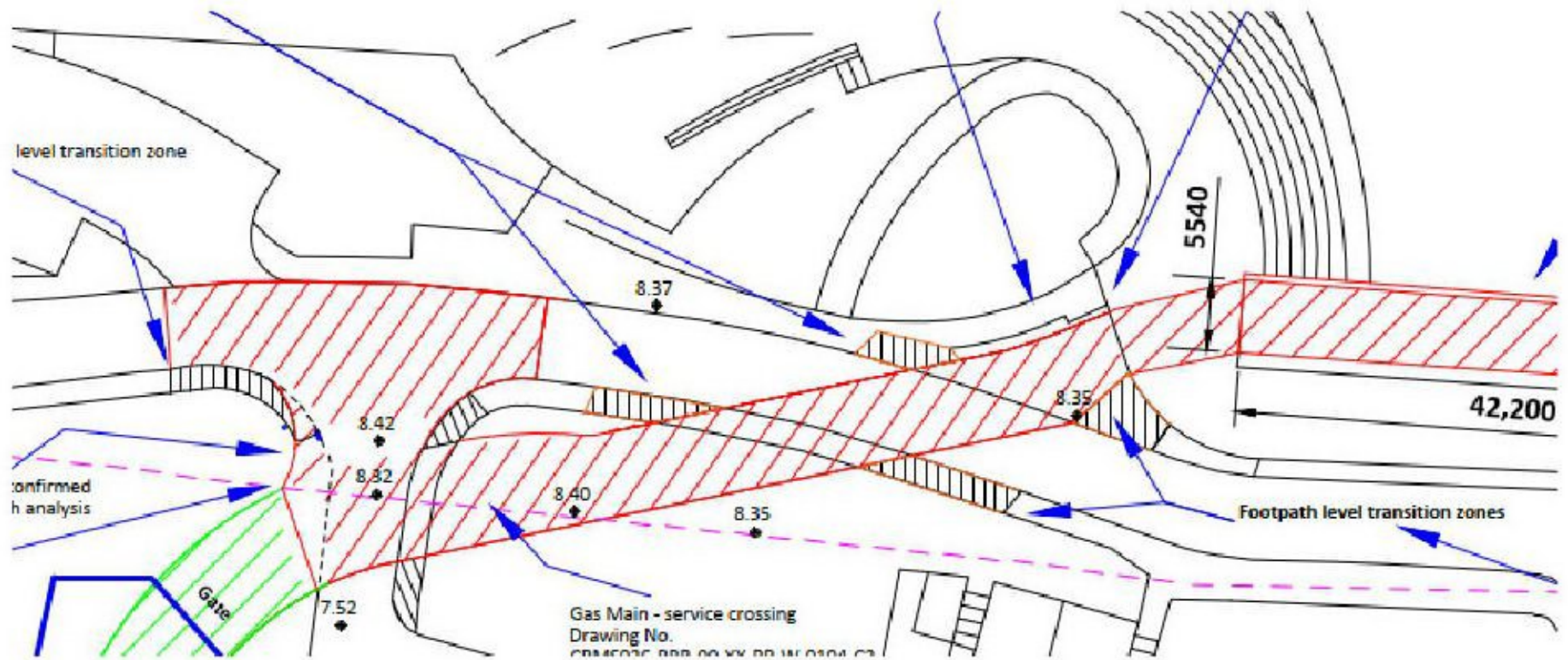
- Complaints and compliments will be recorded, target of 90 per cent of complaints responded to within 24 hours.
- Named Key Senior site personnel to deal with complaints within Balfour Beatty and discussed with Wyre Council .
- If we do have complaints, the individual is personally invited so they can meet us, ask direct questions, and get specific answers; this approach changed some of the early complainants to become advocates of the project
- Aim will always to be resolve with site team (BB and Wyre CC) before escalating outside the site team
- Complaints will be escalated as agreed with Wyre Project Manager
- Vibration and noise monitoring to carried out daily in accordance with agreed noise and vibration plan.

4.0 OFFICE, COMPOUND AND STORAGE DETAILS

The compound and storage areas are located on the Jubilee Garden's carpark and part of the grassed area of Jubilee Gardens off North Promenade.

Access from the compound area to the foreshore will be by a concrete haul road with traffic control as it passes over the highway. As agreed with Lancashire CC highways.

4.1 Access Over the Highway

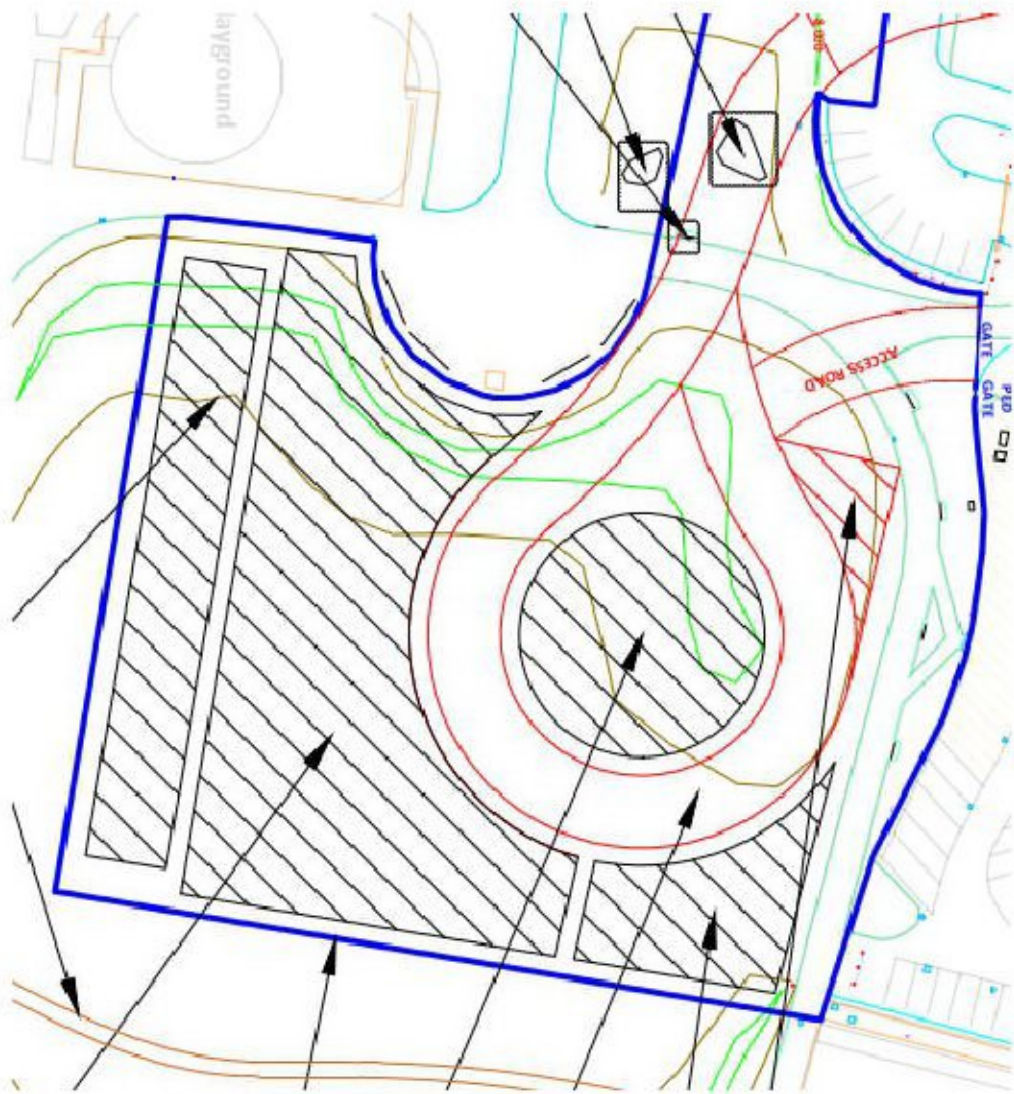


Areas highlighted in red will be reinforced concrete. The area around the entrance will also be removed and replaced with concrete due to the potential highway surface damage caused with wagons turning into the compound

4.2 Compound

The main compound will be set up with solid hoarding, shown in blue below. This will protect against noise, dust and light issues. The main access into the site compound will change for concrete to a tarmac surfacing, all of the circular route will be hard surfaced.

The circular route removes the need for reversing, reducing safety and environmental (reversing vehicle noise) concerns.



The hard surfacing through the main access routes will assist in keeping the area clean. Hard surfacing allows the use of a road brush to keep the compound area and highway clean.

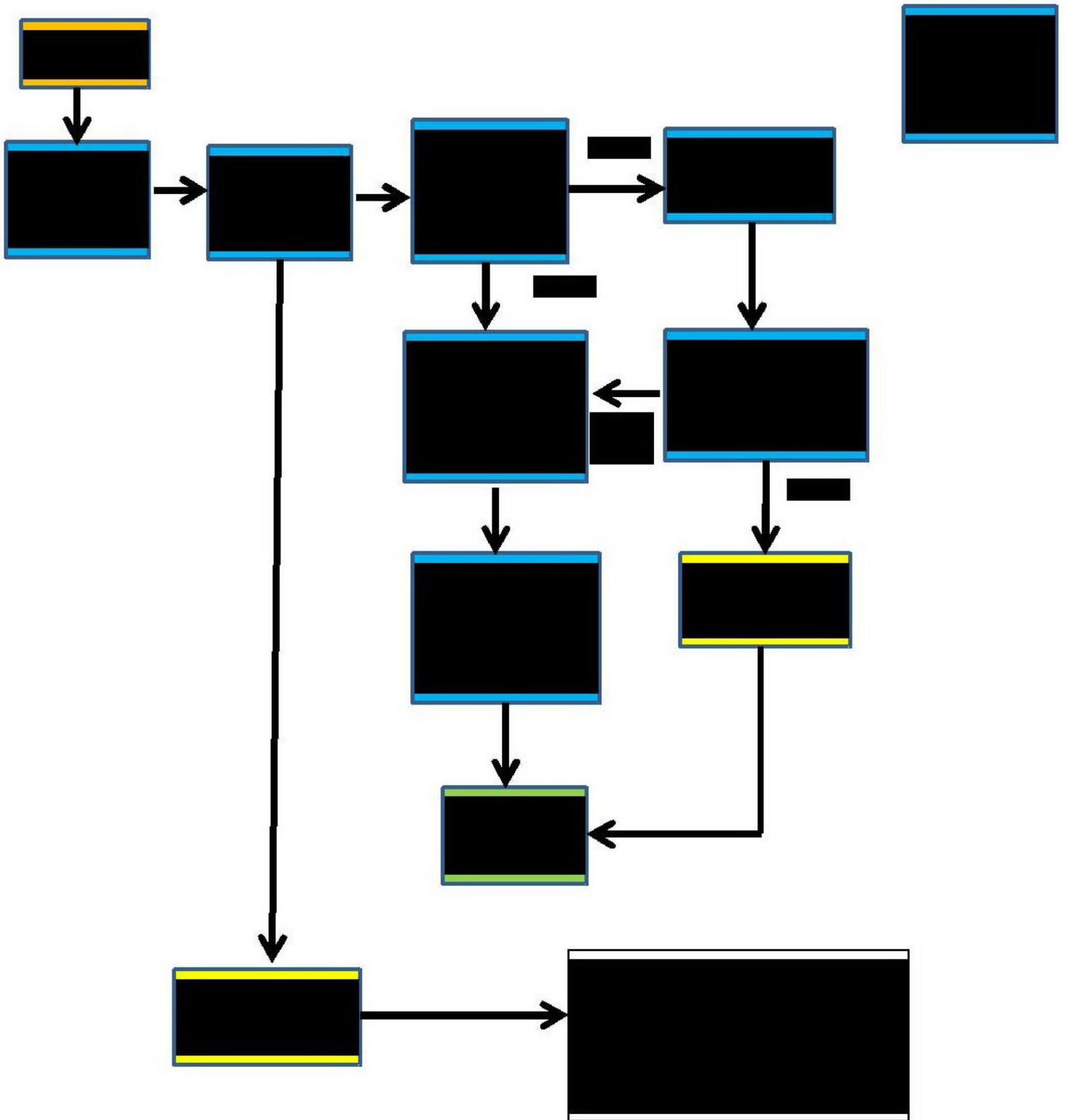
The black hatched areas will be for storage, including rock, excavated unsuitable material, construction materials. The southern (rectangular) strip will store the topsoil removed during the compound storage area establishment for future reinstatement.

A COSHH store will be set up adjacent to the main welfare, gas oil re fuelling of plant will only take place within compound areas hatched in red above. This area will be hard surfaced, all fuel storage to be in bunded tanks (bundling to at least 110% of holding capacity and secured when not in use). Spill kits will be based in the site stores adjacent to the fuel storage area.

Details of fuelling up will be included in the Method Statements and Risk Assessments for the plant operators. Only plant operators will be allowed to re fuel their own machines.

If required and as detailed in the emergency plan a specialist marine pollution company Briggs Marine can be contacted to assist in an environmental incident.

Flow Chart for an Environmental Incident, taken from the Site Emergency Plan



4.3 Office and welfare

The temporary site offices will be placed within the existing carpark area and will include welfare facilities such as canteen, drying rooms and separate male and female toilets. Provision within the offices will be made for Wyre Council staff.

Generators will initially power the site set up whilst a permanent connection is installed generators. Waste will be taken to the public sewer.

The offices and welfare will be single height cabins as not to protrude above the wall on the northern boundary.



The offices will be separated from the carpark by mesh fencing, workers' car parking will be within the existing carpark which will be closed during the working week. Arrangements will be made during high season to allow public car parking at weekends.

Separate units will be provided at the entrance to the compound for gatemen, controlling site entrance, highway crossing and access onto the foreshore.

5.0 NOISE

5.1 INTRODUCTION

Recognising that noise and vibration from construction works can have a significant effect on the amenity enjoyed by residents living in the locality of the works and on the health and safety of the construction workers themselves. This section demonstrates how noise during construction works will be managed, to minimise disturbance and disruption to persons living and working in the vicinity of the works.

The main part of the permanent works is to place rock armour on the foreshore, due to the size of the rock armour (5-8 t) the construction plant required to place it has be larger than normally observed on a more traditional construction project. The negative impact is, the larger the plant required the more noise they generate.

5.2 Objectives

The objective for the noise management plan is to adopt the most practicable measures and procedures in order to minimise noise during construction work that could constitute a health hazard to persons working on the site, or a nuisance to the public living near to the site.

In general terms this will be achieved in accordance with procedures and requirements set out in BS5228:2009 - Part 1(Noise)¹ and Part 2 (vibration)². Procedures will include:

- Minimising the noise / vibration as far as possible at source
- Attenuating the transmission of noise / vibration.
- Undertaking identified noisy activities at a time when they are least likely to result in personal discomfort or disruption.
- Providing advance notice of unavoidably noisy activities
- Monitoring the noise and vibration levels at residential locations to ensure that specified limits are not exceeded and, thereby providing feedback on the effectiveness of noise and vibration reduction measures.
- Providing auditable records to Wyre Council and residents of noise and vibration levels.

5.3 Control Measures

The design of the construction operations, including the selection of plant, will recognise the need to minimise noise and vibration generated during these operations. In particular, best practicable means will be used to minimise noise generated by the works. In establishing criteria, controls and working methods, account will be taken of guidance provided in BS 5228 Parts 1 and 2.

Balfour Beatty CSUK have minimum plant standards which form part of all subcontract documentation. These documents outline the mandatory requirements, including stipulations of well maintained plant & equipment, for operating on a Balfour Beatty scheme. These documents are available on request.

¹ BS5228-1:2009. Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

² BS 5228-2: 2009 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration

Balfour Beatty Staff Responsibilities

The table below sets out the noise management within the Balfour Beatty team

Owner	Environmental Responsibilities
Project Manager	<p>Overall responsibility for the performance of the Project in terms of compliance with the Contract and environmental requirements.</p> <p>Taking corrective action in response to reported non-compliance with predicted noise levels arising from construction activities.</p> <p>Mobilising resources to address the issues and formulating and implementing measures to prevent recurrence in conjunction with the Environmental Manager.</p> <p>Procuring and overseeing installation of acoustic noise barriers, web-based noise and vibration monitoring equipment and ensuring written notification of the works is given to local residents.</p>
Sub Agent	<p>Responsible for communicating the Noise and Vibration Management Plan to subcontractors and the effective management of the works in line with the Plan. Responsibility for the management of construction activities and for ensuring Best Practicable Means (BPM) are identified and implemented.</p>
Public liaison officer Noise and Vibration Specialist	<p>Resolving noise related comments or complaints from neighbours and proactively managing relationships with stakeholders.</p> <p>Periodically check and evaluate noise and vibration data recorded by web-based noise and vibration monitors and provide feedback to PM.</p> <p>Assist in the investigation of any noise or vibration complaints, if required.</p> <p>Advise on the performance of existing noise mitigation and make recommendations for additional mitigation, if required.</p>
Works Supervisors	<p>Responsible for employing BPM on a daily basis to minimise environmental impacts.</p> <p>Noise and vibration control to be addressed in daily briefings to ensure the workforce are aware of their responsibilities in minimising noise and vibration</p>
All Personnel	<p>Staff and sub-contractors at all levels have a key role in achieving the environmental objectives and ensuring that BPM is employed at all times</p>

5.4 Predicted Noise Levels

The table below was taken from the Balvac noise report and is inline from expectations from the recently completed Rossall Coastal Scheme involving similar works

Table 6.3 Predicted Noise Levels for all Significant Work Activities – Daytime

Noise Sensitive Receptor	Predicted Noise Levels for Daytime Works including Saturdays – LAeq, 1hr (dBA)					
	Earthworks – Compound and TW4&TW7		Compound Operation		Site Activities – Groyne Installation	
	Worst Hour	Typical Hour	Worst Hour	Typical Hour	Worst Hour	Typical Hour
R01 – 26 Ocean View	69	63	63	54	54	50
R02 – 43 Carr Street	63	60	60	55	63	53
R03 - 47 North Promenade	64	48	45	42	72	55
R04 – Rossall Court	- ¹	- ¹	- ¹	- ¹	71	54
R05 – 41 Rossall Promenade	- ¹	- ¹	- ¹	- ¹	73	53

¹Noise predictions not carried out due to distance from works being greater than 300 metres

5.6 Site Operation -Construction

The noise impact on the resident is due to the close proximity of the dwellings to the work area, as near as 25m.

One of the positives is that due to the linear nature of the works, the construction operations are transient and will move along the foreshore at 75 linear meters each week depending on tidal working availability hours

Options considered to reduce impacts included

- Review of plant required, modern plant reduces noise but size of plant necessary to undertake operations required. Concluded that original plant sizing was correct
- Noise Reduction Screens – two options considered,
 - Locate on the pedestrian promenade area, requirement for propping would mean the area would have to be closed and the screen and supporting structure would need to be easily dismantled in periods of unsettled weather.
 - The second option would be to place screens mounted on trailers on the highway. A lane closure under traffic light control, may be required. The trailer mounted screens could be positioned as required between the properties and the working area and removed on completion of each shift and the highway opened up. The area up to Five bar gate could be completed with the closure of lengths of car parking bays only.

Design of the screens would be undertaken with the assistance of a Noise Consultant to maximise the benefit and a temporary works review completed to ensure stability of the trailers during strong winds.

The second screening option is the preferred choice to reduce noise levels as advised by Wyre.

5.7 Attenuation at Source-Compound and Haul Road

Consideration given to attenuation of noise and vibration at source by means of the following:

- Giving consideration to effect of noise, in selection of construction methods.
- Avoidance of vehicles waiting or queuing, particularly on a public highway with their engines running. -Main crossing to be controlled by traffic lights, compound designed to store multiple vehicles delivering at a single time.
- Ensure plant and equipment is well maintained.
- Fit and maintain silencers to plant, machinery and vehicles where appropriate.
- Operate plant and equipment in the mode of operation that minimises noise and shut down when not in use.
- Use electrically powered plant rather than diesel where possible.
- Haul routes constructed of permeant materials such as Concrete or Tarmac reducing noise and vibration.
- Onsite traffic routes developed to eliminate reversing (compound loop as shown in item 4.2).

5.8 Attenuation of Noise in Transmission Path

Consideration given to attenuation of noise and vibration in the transmission path by means of the following:

- Design and use of site solid hoardings as shown in compound layout
- Screens, where practicable and in agreement with Wyre Project Manager as mentioned in Section 5.6
- Locate plant and equipment liable to create noise and/or vibration as far away as possible from sensitive receptors or use natural land topography to reduce line of sight noise transmission.
- Provide lined acoustic enclosures for equipment such as static generators and where applicable portable generators, compressors and pumps.
- Fit anti-vibration mountings to rotating and/or impact equipment where practicable.

5.9 Noise Levels for the works outside of the adjacent properties

Normal Consented Working Hours:

Monday to Friday: 0800-1800 and Saturday 0800-1300 LAeq(1 hour) 65dB

Outside of normal consented working hours

Monday to Friday: 1900-2300	LAeq(1 hour) 55dB
Saturdays: 1300-2300	LAeq(1 hour) 55dB
Sundays: 0700-2300	LAeq(1 hour) 55dB
Night times (2300-0700)	LAeq(1 hour) 45dB

Rock Storage – due to the areas available, rock storage will have to include areas on the beach. These will be agreed in advance with Wyre Council representatives and be located as far from occupied properties as possible. Storage will commence with rocks placed from east to west with the rock stockpiles creating a sound barrier.

5.10 MONITORING AND REPORTING

In line with Local Planning Authority requirements, the proposal is to install and maintain monitoring equipment for the purpose of measuring noise during construction works, measured from the nearest residential buildings.

Equipment will be moved periodically, as construction works advance linearly along the coast, in order to provide monitoring at the closest receptor to the works.

Data from the noise monitoring equipment will be uploaded and available in real time, triggers can be set to alert staff and the information can be shared with Wyre Project Manager. It can also be made available to the Local Planning Authority on request, for example, following complaint.

5.11 INTERFACE WITH THE PUBLIC

Please see Section 3: Public Interface and Complaint Procedures.

6.0 CONSTRUCTION LIGHTING PLAN

6.1 INTRODUCTION

Recognising that lighting from site office and construction works can have a significant detrimental effect on the residents living in the locality of the works. The lighting will be designed for the safe use of the construction team whilst taking into account the amenity of the local residents

6.2 SITE OFFICES INTERNAL

All offices will be fitted with internal sensors for lighting, the only lighting not fitted with sensors will be the emergency lighting only activated by either a power cut or the fire alarm being activated.



All windows will be fitted with blinds reducing the impact during working hours; the external parts of the windows will be fitted with steel shutters that will be closed outside of working hours.

6.3 SITE OFFICES EXTERNAL AND COMPOUND

The external lighting around the office and within the compounds will be set up using sensor activated lighting. This lighting will be set to illuminate the required area for safety whilst pointing away from all residential property similar to installation shown below.



The permeant car park lighting will not be affected by the works and will operate as normal.

Lighting Units

Time guard IP55 Type No SLB400G or similar

Maximum 500w of light using class c energy saving lamp fitted

Light on, maximum 5 minutes

Detection range 12m

6.4 SITE LIGHTING

Additional lighting may be used during the winter months for task specific purposes. All sets will be set up so their beams point away from residential properties. Outside of working hours they will be switched off. All lighting sets will be removed from the foreshore area out of hours.

7 VIBRATION MANAGEMENT

7.1 Introduction

Recognising that vibration from construction works can have a significant effect on the amenity enjoyed by residents living in the locality of the works and on the health and safety of the construction workers themselves. This (CEMP) demonstrates how vibration during construction works will be managed, with respect to minimising disturbance and disruption to persons living and working in the vicinity of the works.

7.2 Objectives

The objective for the vibration management plan is to ensure the most practicable measures and procedures are adopted in order to minimise vibration and thereby prevent construction work from generating any hazards to persons working on the site, or a nuisance to the public living in the vicinity of the site.

In general this will be achieved in accordance with procedures and requirements set out in BS5228:2009 - Part 1(Noise)³ and Part 2 (vibration)⁴. Procedures will include:

- Minimising the vibration as far as possible at source
- Attenuating the transmission vibration.(The haul road will be constructed with a polystyrene barrier adjacent the café cove to prevent vibration as noted in item 7.3)
- Providing advance notice of unavoidably activities that may cause vibration
- Monitoring the noise and vibration levels at residential locations to ensure that specified limits are not exceeded, thereby providing feedback on the effectiveness of noise and vibration reduction measures.

7.3 Control Measures

The design of the construction operations, including the selection of plant, will recognise the need to minimise noise and vibration generated during these operations. In particular, best practicable means will be used to minimise vibration generated by the works. In establishing criteria, controls and working methods, account will be taken of guidance provided in BS 5228 Parts 1 and 2.

Balfour Beatty CSUK have minimum plant standards which form part of all subcontract documentation. These documents outline the mandatory requirements, including stipulations of well maintained plant & equipment, whilst operating on a Balfour Beatty scheme. These documents are available on request.

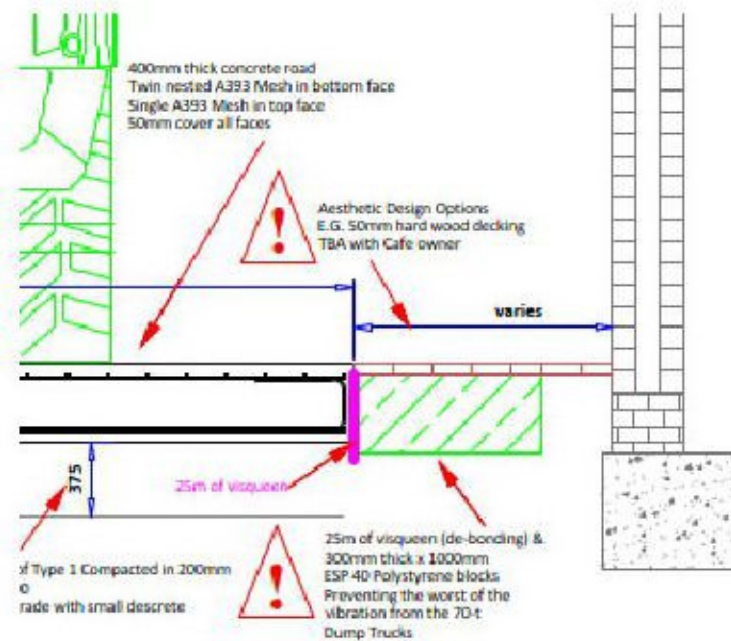
Other control measures to reduce or control vibration

- The promenade and highway protection slab will be at the same level, providing a level area for the plant to run
- Access road and ramp to foreshore to be evenly graded with no steep gradients or corners.
- A 5mph speed limit enforced within site and compound area.
- Loop in the compound to be a smooth tarmac surface to ensure it does not degrade and rut during use.

³ BS5228-1:2009. Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

⁴ BS 5228-2: 2009 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration

- Reinforced Concrete haul road as it passes the Café Cove has been designed with a de bonding strip to reduce any movement induced vibration.



7.4 Timing of Construction Activities

By scheduling, or in setting working hours consideration is given to the fact that the level of noise through the normal working day is more easily tolerated than during the evening and night time. Consented working hours covering construction operations are as follows:

Monday to Friday: 0800-1800
 Saturday 0800-1300

No work on Sundays, or Bank Holidays

Any work completed outside of these hours, would be subject to prior notification to the Local Planning Authority and subject to the noise limits outlined in the following section 5.

No vibration limits have been specified by the Local Planning Authority. Consequently, the proposal is to observe vibration limits with reference to guidance provided in Annex B of BS 5228-2⁵, which are summarised in table 1 below.

Effect on people/building	Vibration level Peak Particle Velocity (mms ⁻¹)
Vibration might be just perceptible in the most sensitive situations and at most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.	0.14
Vibration might be just perceptible in residential environments	0.3
It is likely that vibration of this level in residential environments will cause complaint but can be tolerated if prior warning and explanation has been given to residents.	1.0
Vibration is likely to be intolerable for any more than a very brief exposure to this level	10.0

⁵ Annex B of BS 5228-2: 2009 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration.

Guide values to avoid cosmetic damage to buildings – Residential buildings	15.0 at 4Hz increasing to 20.0 at 15Hz increasing to 50.0 at 40Hz and above
Guide values to avoid cosmetic damage to buildings – Industrial buildings	50.0 at 4Hz and above

Table 1: Effects of vibration taken from BS5228-2: 2009

As indicated in the table, for residential buildings risk of cosmetic building damage starts at a level of PPV 15 mms^{-1} , for primarily transient vibration with this value referred to being at the base of the building or structure. Cosmetic damage means, for example, cracks in plaster, or mortar joints, or extension of such existing cracks.

The threshold of subjectively discernible ground vibration is typically PPV 0.3 mms^{-1} and where ground vibration is above 5 mm/s loose fittings and windows in houses tend to ‘rattle’, resulting in increasing concern to residents.

It is considered that, as per the guidance provided in table 1, vibration up to a limit of PPV 1.0 mms^{-1} for normal daytime construction activity would be tolerated and therefore would not constitute a significant effect. Some activities, such as beach access ramp and haul road installation and removal, could exceed PPV greater than 1.0 mm^{-1} . By monitoring and providing appropriate advanced warnings to residents, PPV levels up to 5 mm/s may be tolerated for temporary short periods. This PPV limit would fall well below the values required to produce cosmetic damage to buildings.

7.5 Monitoring and Reporting

The proposal is to install and maintain monitoring equipment for the purpose of measuring vibration during construction works, measured from the nearest residential buildings. For this purpose, the potentially significant distance will be taken as 20m, this being the distance identified in the noise impact assessment report (reference PJ3210/13409), as providing a sufficient buffer to ensure levels are within defined noise and vibration limits.

Equipment will be moved periodically, as construction works advance linearly along the coast, in order to provide monitoring at the closest receptor to the works.

Data from the noise monitoring equipment will be uploaded and available in real time, triggers can be set to alert staff and the information can be shared with Wyre Project Manager. It can also be made available to the Local Planning Authority on request, for example, following complaint.

7.6 LOCAL LIAISON AND COMPLAINTS PROCEDURE

Interface with the public as section 3

8.0 CONSTRUCTION DUST MANAGEMENT

8.1 Introduction

Recognising that dust from construction works can have a significant detrimental effect on the residents living in the locality of the works the following controls will be implemented to ensure that minimal disturbance is caused and in the event of complaints how remedial action and feedback will be provided to the relevant parties involved.

The main access routes within the compound and turning loop for deliveries will be surfaced using hard materials such as concrete or tarmac. This will significantly reduce the production of dust during construction activities and be significantly easier to keep clean.

As the compound will be hard surfaced and the works undertaken on a shingle foreshore then mud and debris on the highway will be reduced and easier to control than most construction sites

Attendant gate men will be briefed to highlight any issues on the public highway and to act immediately with inspections effectively being completed at real time.

8.2 Construction Activities

During the works dust will be generated from excavation and the movement of spoil and equipment around the site. During the works a road sweeper will clean and dampen the surface to prevent the release of dust. Vehicle movements will be restricted to a maximum of 5mph whilst on site to prevent the needless disturbance of the ground and haul roads.

8.3 Stockpiles of Arisings

All topsoil stockpiles will be sealed at the end of every shift to minimise drying of materials and the release of dust. When necessary, the stockpiles will be damped down and resealed if stored for excessive periods of dry weather.



8.4 Delivery Wagons and Dust on the Highway

Delivery wagons of bulk fill materials being delivered by road will be sheeted to prevent dust and debris from being released while travelling to and from site. Dust sheets will only be removed once the wagon is ready to discharge its load within the site working area.



Regular sweeper visits will be scheduled to clean the local roads of any debris carried from site on to the highway and if required additional targeted visits will be scheduled to ensure that minimal disturbance is caused.



8.5 Local Liaison and Complaints Procedure

- As section 3

9.0 TRAFFIC MANAGEMENT

9.1 Introduction

This section covers the main aspects but a detailed traffic management plan will be completed for the works as part of the Balfour Beatty procedures.

Access to site- Access to and from the site will be as the agreed haul route approved by Lancashire County Council.

9.2 Delivery Vehicle Management –

The area within the compound has been developed to assist in the control of site vehicles movements; it will be surfaced with tarmac and of sufficient size to accommodate five wagons whilst unloading.

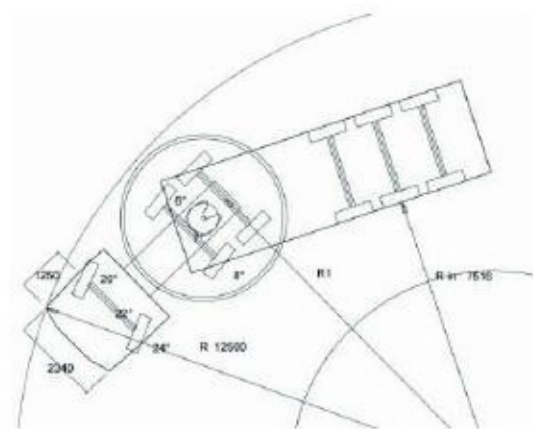
Programmed Delivery of Rock Armour is 1800t week or 360 ton a day, this equates to 13 deliveries/day

Using the figure from Rossall CDS at the peak of rock delivery when material was delivered by Armstrong's Group and Aggregate Industries the following was achieved

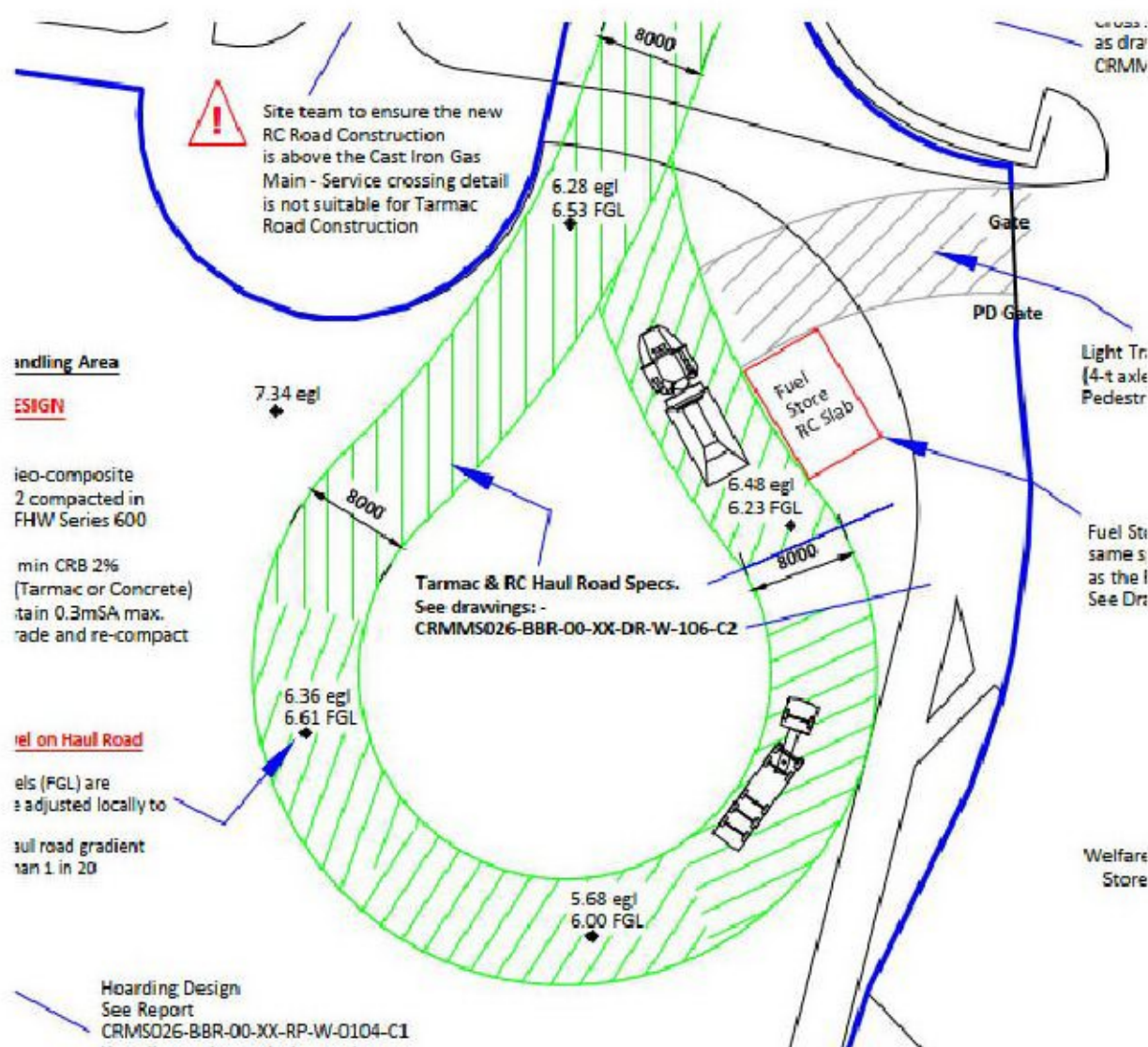
Supplier	Average deliveries/day	Average number of wagons	Tonnage
Armstrong	11	5	315.94
Aggregate Indus	9	2	254.06
Total	20	7	570t

Total of 7 artic units delivering, the site can store 5 at any one time. The artic units used for delivering rock armour are smaller in length than standard artic and the weight they can carry is limited due to the weight of the trailer units, (manufactured from hardox steel to withstand the weight of rocks in excess of 10t.)

Footprint of a typical unit



Compound Layout with a vehicle unit shown



It is not envisaged that we will need to control the timing of the deliveries due to the nature of loading, unloading timings taken at the quarry and the site however if required

- The tractor units are fitted with GPS allowing each supplier to quickly provide a briefing on the units on the road and expected delivery times. If required units can be stored in laybys on the A585 or held at the quarry to ensure the compound is not overloaded. Regular contact (two to three phone calls a day) with the suppliers by the site team will be made, to ensure that breaks/refueling etc. taken do not delay the wagons.

Other controls

- Delivered to site will start with one supplier initially to ensure the operations run smoothly prior to the second supplier commencing delivery.
- Delivery drivers will be inducted prior to arriving on site this will include site routes, rules, delivery times, speed limits (20mph within local area) as well as welfare facilities. The wagons drivers will not be permitted to stop overnight or take their breaks within the compound or immediate area.
- Spot checks will be completed on drivers to ensure route compliance and speed, with GPS trackers fitted this is a desk top exercise by site staff and completed as required
- The highway entrance to the compound will be replaced with concrete
- Entrance and teardrop will be checked to ensure swept path is suitable
- Haul road over the highway will be controlled by traffic lights, these will be manually controlled with access being provided to the construction team on demand, at all other times the lights will be green for public highway users.

9.3 Highway Cleaning

Attendant gate men will be briefed to highlight any debris issues on the public highway and to act immediately with inspections effectively being completed at real time.

Regular sweeper visits will be scheduled to clean the local roads of any debris carried from site on to the highway and if required additional targeted visits will be scheduled to ensure that minimal disturbance is caused.

9.4 Pedestrian Footpath Safety including Promenade

Access along the promenade fronting the Café Cove and immediately north of the construction access route to site will be closed during working times. The east footpath will remain open for the public as agreed with Lancashire County Council. Advance signs and gates will direct the public prior to the closed section. The closure will only remain in place during working hours.

The closures and pedestrian management will be controlled by three banksman. One will be positioned at the site entrance controlling movement over to carpark entrance. The role will include keeping the public from entering the carpark. The second will operate the lights and be responsible for the highway and the barriers for the public on the east footpath. The third will ensure public safety on the promenade and as construction plant accesses onto the beach.