

DEMOLITION PHASE ENVIRONMENTAL MANAGEMENT PLAN CW01 Microsoft Newport



Quinn Radiator Factory
Celtic Way
Newport
NP10 8BE

Issue 03

Ref: CGMS F590 Issue: 03 Rev 00		October 2022 1
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Document Approval & Review Status:

Coleman Project Manager approved.

Name	Position	Signature	Date
Mark Fanning	Project Manager		11.09.23

HSEQ Department / Contracts Director approved.

Name	Position	Signature	Date

Site Supervisor / Site Manager accepted.

Name	Position	Signature	Date

Amendments or reviews

Issue	Date	Revision Details
01	31/08/2023	Initial draft
02	04/09/2023	Updated following Bryan Bradshaw + Gareth Rowe comments.
03	11/09/2023	Revision includes updated Site Layout plan.

This plan will be reviewed every 3 months or sooner subject to factors affecting its suitability. The review table above shall detail the nature of the document review

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1. Arrangements & Controls

1.1. Overview and timescales

This undertaking involves the dismantling of obsolete structures at the former Quinn Radiator factory situated in Newport, known as the Celtic Way project. The site spans roughly 16.59 hectares, forming a rectangular layout. It encompasses a redundant radiator manufacturing facility, accompanied by extensive areas of hard surfaces designed for roads and parking, as well as softer landscaping areas featuring short field grass, shrubs, and both mature and semi-mature trees encircling its boundaries. Although a majority of the original structures remain intact, much of the internal manufacturing infrastructure has been removed to facilitate the movement of drilling rigs.

The site's prominent features include a sizeable L-shaped warehouse and a smaller, similar structure to the south, connected by a concrete slab. In the southeast corner stands a two-story office building. Toward the periphery of the site, mainly to the south and east, you'll find asphalt roads, vehicle parking spaces, and grassy regions adorned with shrubs and scattered trees.

The primary objective laid out in this Scope of Services is to outline the prerequisites for the demolition and reclamation of on-site structures and the removal of related site infrastructure. This is essential to create a clear canvas for future construction activities, which will include new buildings and infrastructure.

The original site, constructed around 1997, served as a radiator manufacturing facility, housing a large production factory, a detached warehouse, a separate office/administration building, and ancillary plant structures, including a sprinkler tank and pump house. The factory and warehouse structures exhibit steel portal frame construction, sheet metal roofs, composite metal wall cladding, and reinforced polished concrete floors. The office building, constructed with a steel frame, combines pitched sheet metal roofs and flat roofs covered with single-ply materials. External areas predominantly feature tarmac roads and reinforced concrete yards, with a reinforced concrete yard situated to the east.

The overarching scope of this project entails the comprehensive removal of these structures, encompassing their foundations and substructures, to create an unobstructed site for the construction of new buildings and infrastructure. Additionally, as part of early works, there is a careful removal of the services bridge link connecting this site to the neighbouring property to the north (referred to as the 'NHS' site), managed under a separate contract.

Several critical service constraints are highlighted, including a gas line along the extreme west perimeter, an above-ground 400kV high voltage line traversing the site, and a main sewer running along the eastern boundary, positioned beneath a raised area just east of the current apron. Another sewer from a neighbouring property also traverses the site, featuring a pumping station in the middle. Adjacent to the site, the NHS property houses a clean room and laboratories ventilation system, which faces the existing demolition

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site. Dust control measures are essential to prevent disruption to this system during demolition.

The Colemans must also factor in previously excavated trial pits and excavations related to geotechnical investigations on the site, allowing for appropriate backfilling to ensure safe circulation during the works. These preliminary actions form part of the enabling works package, which precedes the primary demolition of the redundant radiator group buildings.

Existing record documents and details of known services in the area will be furnished by the client. The Colemans will be responsible for assessing the need for additional surveys before proceeding with the demolition and incorporating any necessary surveys into their plans.

An overview of the structures involved in this package can be seen on figure 1.1 below.

The works consist of the demolition of:

1. 1no. two-storey office building
2. 4no. portal frame warehouses
3. 1no. portal frame warehouse with integral office accommodation
4. 1no. ancillary building.
5. 1no. RC framed enclosed sprinkler reservoir
6. 2no. external concrete yard slabs.
7. 1no. Gas meter building
8. 1no. Sewage pumping station

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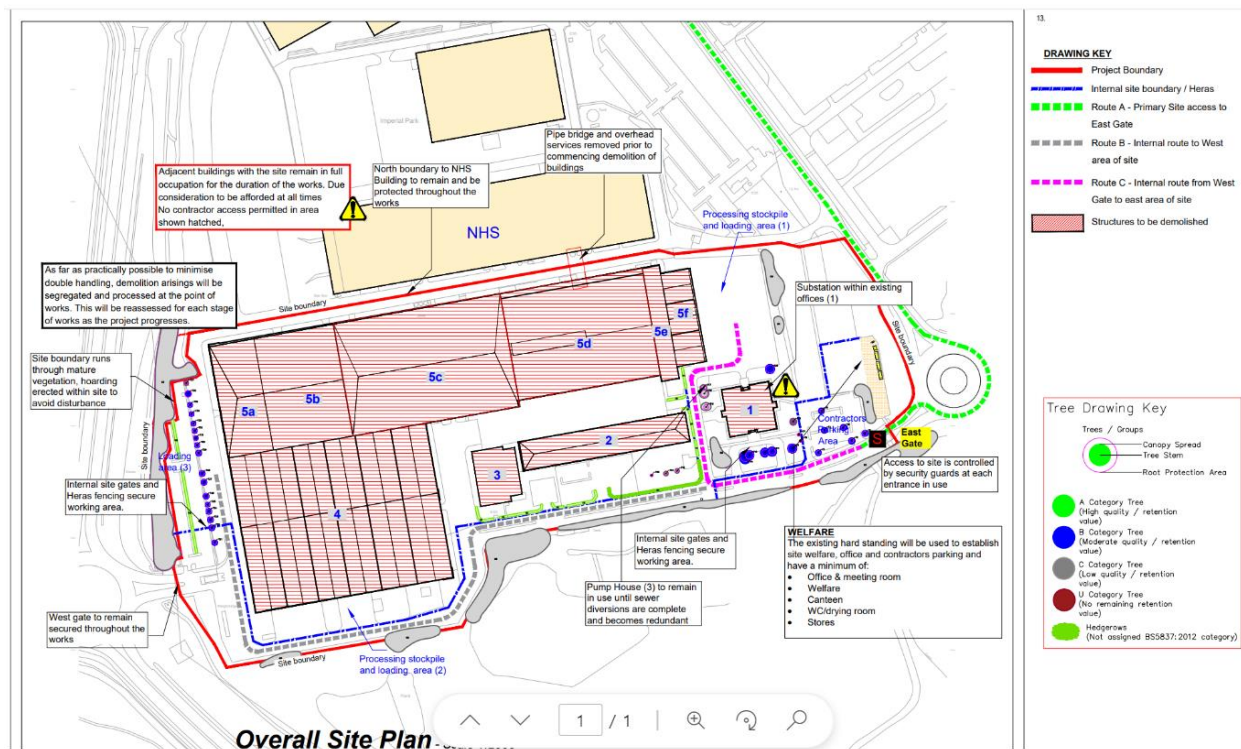


Figure: 1.1 Site layout of buildings to be demolished

The general scope of works and programme for the project is as follows:

Stage	Indicative Start	Indicative End	Duration
Mobilise and enabling works	18.09.23	13.10.23	4 weeks
Soft Strip of office Buildings	25.09.23	20.10.23	4 Weeks
Demolition + Drainage Diversion	23.10.23	12.04.25	18 Months
Demobilise	15.10.25	22.10.25	1 Week

1.2. Local environment

The former Quinn radiators site lies within an active business park titled Imperial Park and is approximately 2miles West of Newport town centre Images 1.2a-c below, highlights the location and key receptors bordering the site.



Image 1.2a

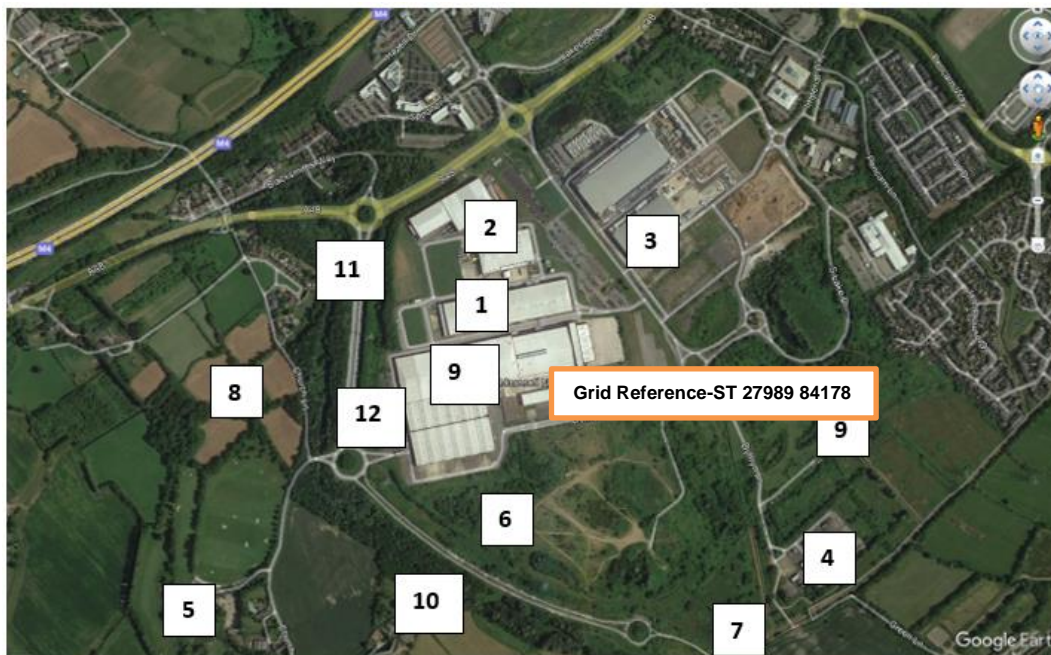


Image 1.2a

1	NHS Wales Procurement Warehouse/facility
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2	Imperial Park tenants
3	Ongoing construction and redevelopment projects opposite site
4	National Grid Imperial Park Substation
5	Golf club
6	Possible nature reserve (TBC)
7	Waterway
8	Farmland/agricultural land
9	Former Quinn radiators site
10	Site of Special Scientific Interest (SSI)
11	Overhead electricity pylons (11kva)

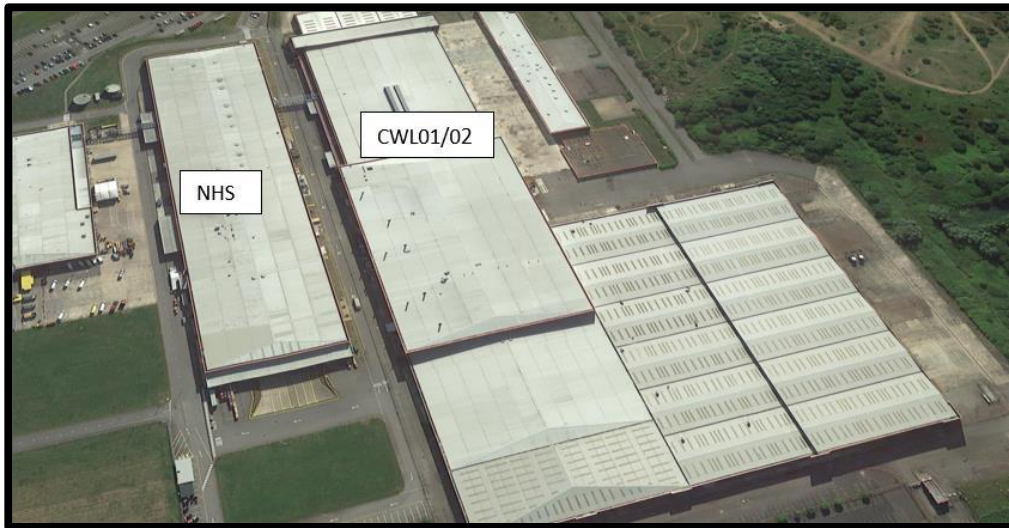


Figure: 4 Location of NHS Building and CWL01/02 for demolition

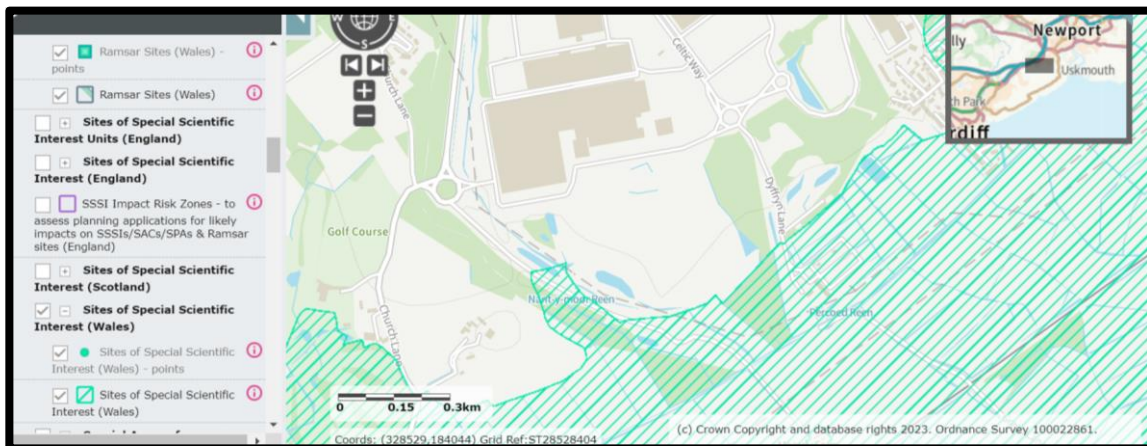


Image 1.2c (SSSI map)

Most of the external areas are hardstanding, comprising tarmacked/paved, or concreted roadways and parking. Some soft landscaping is present across the site with mature trees and shrubs.

1.3. Working hours

The operation of the site equipment generating noise and other nuisance causing activities, audible at the site boundaries or in nearby residential properties shall only be carried out between the hours of 08:00 – 18:00 Mondays-Fridays, 08:00 -13:00 Saturdays and at no time on Sundays or Bank Holidays unless otherwise agreed in writing by the Local Planning Authority.

All works must be phased so neighbouring buildings can remain operational with no disruption to its building occupants or sensitive areas. Sensitive areas are defined as clean rooms/laboratories which are located within the NHS demises.

1.4 Key Contacts

Role	Company	Name	Contact
Client	Microsoft	Eanna McDarby	T: 07711 287677 E: eanna.mcdarby@microsoft.com
		Chris Coward	T: 07967 444549 E: chris.coward@bcs.uk.com
		(Director of Project Management)	T: 07974 976767
		Mike O'Connell (EHS UK Lead)	E: y-moconnell@microsoft.com
		Scott Ridley (Security Operations Manager)	T: 07811 033984 E: scottridley@microsoft.com
Principal Designer	RED Engineering	Lisa Johnston	T: 07826 301108 E: Lisa.johnson@red-eng.com
Property Manager	G-Capital	Rod Thomas	T: 07789 507968 E: TBC

Client Neighbour	NHS Wales	Gareth Watkins Gareth Saunders	T: 07818 454492 E: Gareth.Watkins@wales.nhs.uk T: 07977 689785 E: gareth.saunders1@wales.nhs.uk
Principal Contractor	Colemans	Gareth Rowe (Ops Director) Mark Fanning (Project Manager) Bryan Bradshaw (Director - HSE) Albert Bouncer (Site Manager) Nick Thomas (H&S Manager) Pooja Vijay (Environment and Sustainability Manager) Elliot Hutchings Project Environmental & Sustainability Manger	T: 0121 325 2424 E: gareth.rowe@colemanspecialistcutting.co.uk T: 07837743310 E: mark.fanning@coleman-group.co.uk T: 07815054536 E: bryan.bradshaw@coleman-group.co.uk T: 07715 901446 E: albert.bouncer@coleman-group.co.uk T: 07725 261972 E: Nick.thomas@coleman-group.co.uk Pooja.vijay@coleman-group.co.uk Elliot.hutchings@coleman-group.co.uk 07725 260428
Services – M&E	MAG	Neil Donno	T: 07500 933853 E: neil@magltd.co.uk
Services- Water & Gas	Solvit	Tony Jones	T: 07977 212870 E: tony@solvitwales.co.uk
Asbestos	Central	Andy Summerfield	T: 07970997879 E: andy@centralasbestos.com
Water	Dwr Cymru Welsh Water	General	T: 0800 980 8800

Regulator	Natural Resources Wales	Enquiries Emergency	T: 0300 065 3000 E: enquiries@naturalresourceswales.gov.uk
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1.5 Project objectives

Environmental objectives have been agreed for this project and will be displayed on the site noticeboard. As part of your induction process all persons connected with the works are asked to sign the objectives as a demonstration of your commitment to maintaining environmental excellence. The following objectives have been agreed (note that for the purposes of consistency, these objectives mirror those in the DHSP).

- Zero cases of reportable incidents
- Zero validated complaints from local receptors as regards statutory nuisances or disruption
- Zero cases of damage to local infrastructure
- Zero cases of unplanned disruption to neighbouring businesses
- Minimum of 95-98% non-hazardous waste recycling rate
- Use of HVO fuel to reduce associated fuel emissions by up to 90%
- 100% use of FSC accredited timber products (new products)
- Use of eco hybrid energy efficient cabins
- 1 EasiApp (HSE inspection) and 3 HazzApp's (hazard reports) per week with closure of actions with 7 days
- Registration with the Considerate Contractor Scheme
- 10% of workforce live within 35-mile radius.

The Coleman CGMS (Coleman Group Management System) is registered to ISO 9001:2015 Quality Management; ISO 14001:2015 Environmental Management; ISO 45001:2018 Health & Safety Management and PAS 99:2012 Integrated Management System. As such, this project shall adhere to the principles and assurances of these standards and Coleman CGMS, policies, procedures, and strategy.

1.6 Stakeholder consultation and engagement

The following mechanisms are proposed as regards consultation with stakeholders.

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- Daily coordination meetings to keep NHS/other relevant site stakeholders informed of works.
- Notification to local authorities for use of crushers on site
- Consultation with water authorities for potential water discharge application
- Contact details of Coleman and Client project team have been made available to key NHS site Managers and Landlord (G-Capital),

1.7 Site access, traffic management and logistics

1.7.1 Traffic management plan

Please refer to image 1.7.1a for proposed traffic management routes. Purple route indicates primary site access via Celtic Way security controlled East gate. Green route indicates heavy plant access route only via A48 secondary controlled West gate. The site speed limit is 10mph.

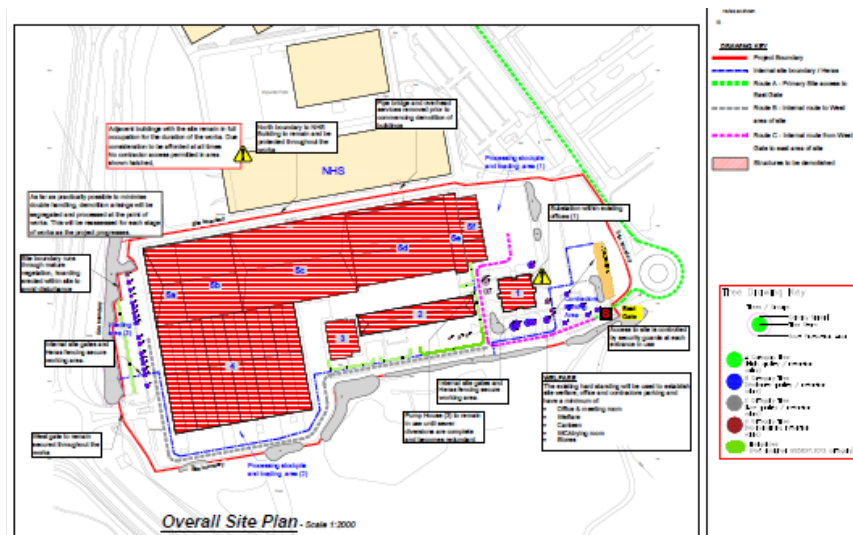


Image 1.7.1a

Where the works interface with NHS Wales boundary, a temporary road closure will be put in place on the NHS internal road along the southern boundary and coordinated with NHS Wales. Proposed arrangements are depicted below in image 1.7.1b (red lines indicate road closure extent).

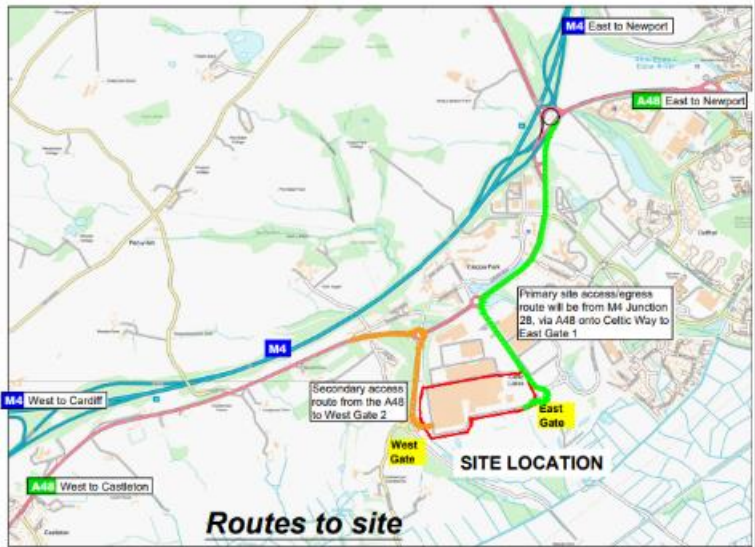


Image 1.7.1b

A wheel washing facility shall be installed and operated to ensure that dust/debris is not carried onto the road by vehicles exiting the site.

1.7.2 Public transport

It is expected that due to the location of the site and duration of works, the main bulk of journeys to site will be from company and private vehicles. However, the main bulk of workers will be lodging in the local area and vehicle sharing will be encouraged with unnecessary journeys discouraged.

Newport Train Station is approximately a 10-15-minute (4.5 miles) taxi/car journey to site. It may be possible pending on numbers and arrival times to organise a crew bus to pick up persons travelling by train.

There does not appear to be a consistent bus timetable from Newport Station to site.

Walking from Newport Station is estimated at approximately 1 hour 30 minutes.

Space for bicycles will be provided on site.

1.7.3 Parking on site

A limited number of spaces will be provided for parking on site, but these will be limited to encourage vehicle sharing or use of public transport.

Vehicles will be required to enter through the East gate and follow the signs for parking. Vehicles are not to park in NHS spaces, areas off site with parking restrictions or which are reserved for members of the public, local business users or residents.

1.7.4 Expected vehicle movements and plant usage.

Throughout the different stages of the project, we anticipate the following number of vehicle movements.

Phase/Stage	Duration	≤3.5t	3.5t – 7.5t	≥ 7.5t
Mobilisation and enabling works – services and utility disconnections, site establishment, fencing etc,	4 Weeks	5	4	30
Soft Strip	4 weeks	3	3	49
Demolition + Drainage Diversion.	55 Weeks	10	10	200*
Demobilise	1 day	2	1	1

*Assuming all metal waste is removed from site and not re used on site.

To avoid unnecessary travel in certain circumstances where site attendance is not essential, meeting invites will include 'Teams' invites.

Throughout the different stages of the project, we anticipate the following plant/equipment to be utilised.

Phase/Stage	Duration	Excavator	Articulated Dumper	Concrete Crusher
Mobilisation and enabling works – services and utility disconnections, site establishment, hoarding, vegetation / tree removal	4 Weeks	1	1	0
Soft Strip	4 Weeks	2	1	1
Demolition of Structures + Drainage diversion.	55 Weeks	18	2	2
Demobilise	6 days	1		

1.7.5 Vehicle standards and air quality

All operators are to be accredited to The Fleet Operator Recognition Scheme (FORS), to silver or gold accreditation.

All commercial road vehicles attending the site must meet European Emission Standards pursuant to the EC Directive 98/69/EC of Euro 4 for petrol vehicles; Euro 6 for diesel vehicles and Euro VI for all lorries and specialist heavy goods vehicles.

HVO sustainable fuel will be used in place of gas oil and DERV offering a potential 90% emission saving.

Engine idling will be discouraged and there will be no burning of waste on site.

1.7.6 Site access and restrictions

The site is only to be accessed within the working hours listed as per 1.3 and via the routes indicated in section 1.7.1

It is proposed to continue to use the existing site gates which will always remain locked to deter trespass. Instruction from Traffic Marshals or security is to be complied with, this includes random security searches of vehicles.



Image 1.7.7a – main vehicle security entrance

Access to site is via the security point off Celtic Way. This entrance has 24-hour manned security. Access to site will only be permitted by prior agreement and arrangement.

In the event the secondary entrance to site is required at the West End of the project – arrangements should be made in advance, so security barriers are activated.

Vehicles should not access the neighbouring NHS car park or site without prior consent and approval.

All visiting vehicles should reverse park within the designated bays within the site.

- 1) The site speed limit is 10mph and all site signs are to be complied with. Non road vehicles are to utilise their beacon and lights when operational with drivers/operators using seatbelts. Also, suppliers are to provide engine plate and euro compliance data to Colemans for verification as a best practice for NRMM.

1.7.7 Vehicle condition

Drivers are responsible for ensuring the vehicle they bring to site is in a road worthy condition. Operational plant when working on site will be subject to pre use recorded inspections with defects reported and actioned in a suitable timeframe.

Important - all operators are to ensure they undertake tyre checks including tyre pressure checks as part of daily pre-use inspection; pressure gauge to be available.

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1.7.8 Wheel wash facility

Given the nature of the works, a wheel washing facility shall be installed and operated to ensure that dust/debris is not carried onto the road by vehicles exiting the site. All vehicles shall be inspected before they leave site to ensure that the skip trucks have been cleaned, sheeted and are suitable to leave site. There shall be separate dirty and clean demolition zones.

All vehicles working in the dirty zone shall be brought to and removed from site on flat bed trailers. Any skip lorry shall arrive to site on a clean public road and prior to leaving shall also be inspected before leaving site.

Wherever the potential exists to spread dirt from site onto the public highway from vehicle wheels, a wheel washing facility will be maintained near the site exit. The wash facilities will be fitted with rumble grids to dislodge accumulated dust and mud prior to leaving the work site. Run-off will be contained suitably on-site to prevent it running into the highway.

1.7.9 Communication

Transport companies are to be provided with the traffic management plan in advance of attendance on site. Traffic route signs will be displayed, and signs are to be complied with at all times.

Drivers are not to use horns to communicate unless required for emergency or safety reasons.

1.7.10 Vehicle/plant and pedestrian interface

Vehicle and pedestrian routes will be defined within the site using signs and traffic control barriers with integrated pedestrian crossing gates/hoops installed. All persons on site outside of the allocated safe welfare area or other PPE free zones must wear high vis clothing.

The movement and activity of heavy plant will be controlled within fenced off areas that prevent general access. A Gateman will control access to these areas unless the gate remains locked. 2-way radios are to be used to contact working parties and plant operators. It is essential that operational plant is turned off and isolated with the attachment grounded before approaching and that the machine is only reactivated once all persons are safely clear of the area, and this is confirmed. Always ensure the operator has seen you and knows you are there using the radio and 'thumbs up'. Important - all persons to be familiar with and implement Coleman & Company poster "know your safe zones".

Where vehicle or plant movements occur near people, or where an element of coordination is required to complete the manoeuvre/task safely, a trained and

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competent Traffic Marshal or Banksman will be appointed to coordinate that movement. Marshals and Banksmen must however always remain in a place of safety, not putting themselves at risk of crush/trapping injury.

All routes are to be sufficiently always illuminated. Minimal temporary lighting may be introduced purely on the grounds of safety during darker hours and will be angled and screened to retain light within in the site ensuring not excessively bright that it will likely affect residents at night. Lighting will not be run at night apart from that needed to aid security.

1.7.11 Deliveries, collections, loading and unloading.

Deliveries, collections, loading and unloading must be planned and within the agreed hours to avoid any off-site waiting. Loading and unloading RAMS will be produced to cover the typical expected loading/unloading activities.

Deliveries will be off loaded into the storage compound. When collecting items, drivers are responsible for ensuring the load is secure before leaving site. Persons operating plant/machinery to aid a delivery/collection must be trained and competent in that process.

1.7.12 Minimising reversing and unnecessary movements

Please refer to section 1.7.1 for typical routes and one-way systems are turning circles. Obviously throughout the works all such routes must remain under review and updated as necessary, but consideration is always to be given to eliminating reversing and using established and controlled routes and turning circles. A competent Traffic Marshal or Banksman wearing high visibility clothing must be used for reversing or turning manoeuvres outside of established routes or where there is potential interaction with people, plant, or infrastructure. Only industry recognised hand signs are to be used to aid direction.

1.7.13 Refuelling

A dedicated refuelling area will be defined on a hard-standing area to aid the control of refuelling from a central point. The double skinned bowser will be locked when not in use with the hose replaced into the integral spill containment between use. Oil spill kits and AFFF foam extinguishers will be in the area.

1.7.14 Maintenance of internal roadways

The Site Manager shall ensure on a day-to-day basis that visual checks are carried out to ensure the internal roads remain in a fit and safe condition.

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1.7.15 Network operator assets

Network operator assets located near or under traffic routes will be assessed to facilitate the safe passage of heavy goods vehicles and plant. Dedicated crossing points will be installed to safeguard underground, and overhead services or no-go zones established to keep heavy plant away from the area.

1.8 Asbestos

All asbestos containing materials identified in the refurbishment and demolition asbestos surveys will be removed prior to the soft strip and demolition phases that could otherwise disturb them. The location of ACM's will be discussed with workers and visitors during the induction process.

Asbestos is only to be removed by trained and competent operatives in a controlled manner working to an agreed plan of work. For reassurance, indicative air monitoring will be undertaken during the works. Higher risk materials constituting>NNLW or LW will be removed by a licensed contractor following the notification period to the HSE. All air monitoring, clearance certificates and consignment notes will be retained on site.

All ACMs will be marked up with paint using the company colour scheme (i.e., red letter 'A') to identify them in the workplace. The asbestos survey will be referred to for this purpose. The Site Supervisor will check and confirm all asbestos materials in the contractor's scope have been removed.

Should any unexpected ACMs be discovered, works are to cease, the area barriered off and the Site Supervisor and project team informed. It is important that if you have been inadvertently exposed to asbestos and could be contaminated, you do not spread contamination to other areas, therefore local individual decontamination will be required before leaving the area. This can be undertaken through the asbestos contractor (if on site) or by using one of the dedicated emergency decontamination boxes. Sampling and assessment will then be organised and if confirmed as asbestos, a methodology and safe systems of work will then be developed for removal.

All soft strip and demolition operatives are to hold asbestos awareness training.

The asbestos survey will be held on the Project Sharepoint site (electronically) for the project, but the survey is to be checked for adequacy/caveats.

1.9 Excavation

From the site due diligence works this site has been summarised as a low risk due to history and previous developments on the site. Excavations will be extensive part of the project to remove existing services and slabs, lighting columns etc. These works will therefore involve ground disturbance and excavation. For excavation and grading, the following procedures will apply:

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- Confirming services/utilities and live/abandoned boreholes are not present or if present are disconnected and can be removed or safely protected.
- Services plans, and records are legible, up to date and have been consulted.
- A permit to excavate has been issued and communicated with a clear scope and reference to applicable hazards.
- CAT scanning of area has been undertaken by a competent person and areas scanned marked on drawings (repeating a scan every 300mm excavated);
- Hand dug trial holes are formed to verify the precise location of services, using insulated tools, digging at the side of the service rather than digging directly over the top of it. No mechanical excavating or power tools within 500mm of the service
- Safe hand digging/vacuum excavation practices employed where mechanical excavation may jeopardise utilities.

Excavation works are to be in line with HSE publication HSG247 'avoiding danger from underground services.

1.10 Substances (inc potential ground contamination)

COSHH assessments are required for all hazardous substances encountered on this project. Substances (this includes chemicals, fuel, oils etc.) are to be stored in dedicated 'COSHH' storage/bunded areas (capable of withholding 110% capacity of the largest container) and have lids and labels fitted.

There must be no hot works or smoking near container stores. Refuelling and plant maintenance is to be done in dedicated areas away from drains.

No materials are to be disposed of down site drainage. Bunds will be monitored for overfilling. All spills must be reported but refer to CGMS P344 for practical guidance on how to handle a spill. Spill containment provisions are located in the following locations and will check regularly and recorded on CGMS F345:

- Site welfare.
- COSHH compound.
- Manoeuvred around areas by the teams subject to work activity undertaken.
- contaminated machinery pits to be recovered.

1.11 Lead/fume and hot works

Wherever practical, redundant steelwork potentially consisting of lead paintwork or lead flashing will be handled mechanically. Should hot works be required, the works will take place away from the site boundary with wind directions monitored to avoid fumes being carried off site and causing nuisance to local receptors.

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No acetylene will be held on site. Empty cylinders will be removed regularly and stored separately in cages from full cylinders. Cylinders of different gasses will be stored a minimum of 3m apart. Oxygen and propane cylinders will be stored 15m away from the site boundary and placed or protected from potential vehicle impacts. Cylinders will be turned off when not in use and subject to pre use inspections.

1.12 Pests, Guano and carcasses

Bait boxes are located in external and car park areas in the client's area. No evidence of any infestation was evident at the time of survey. However, the buildings owned by the client have been unoccupied for long periods of time and there may be a risk of guano, rat faeces/urine etc present. Security personnel have witnessed rodents on the site demise as part of their security checks. The site is also neighboured by fields and therefore the likely hood of pests/local wildlife is considered likely. Should any person onsite observe rat, must report to Site manager, and not attempt to handle the rat. Bins with waste should be covered. Where any build up has occurred, these substances will be removed under a dedicated SSOW. Direct skin contacts and generation of airborne dry spores is to be avoided as they can be an irritant and lead to ill health.

Work in these areas must be risk assessed and control measures clearly identified inclusive of emergency procedures, PPE, RPE and first aid arrangements etc. The materials are to be wetted and collected under controlled conditions in bags for disposal. The area should be inspected prior to clearance activities taking place to identify any potential hazards. All Ecological reports to be reviewed in full when received.

All work with substances is to comply with:

- Control of Substances Hazardous to Health Regulations 2002

The following CGMS forms apply to this section.

Document name	CGMS ref	Purpose
COSHH assessment	CGMS F438	To outline controls for works with substances

1.13 Dust

Suitable dust suppression systems must be employed and COSHH assessments must be made available on site for the generation of dust. Penetrations into the building fabric will be remove services etc, extraction/damping down must be used and works must be scheduled when the least amount of personnel will be affected.

The NHS building has both clean rooms and laboratories which at the time of survey were advised have ventilation vents at roof level. Works must be carefully planned to ensure dust does not enter these areas. Close liaison with the NHS will be required to control dust.

<https://www.hse.gov.uk/pubns/guidance/cn4.pdf>

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Real-time dust monitoring units will be installed around the site prior to phases of works likely to generate dusts.

PM10 monitors should be installed according to the European Directive 2008/50/EC: - The flow around the inlet sampling probe shall be unrestricted (free in an arc of at least 270 degrees). There should be no obstructions affecting the airflow in the vicinity of the sampler, normally some metres away from cabins, trees and other obstacles but at least 0.5m from the nearest building. Inlet sampling point shall be between 1,5m (the breathing zone) and 4m above the ground. The inlet probe should not be positioned in the immediate vicinity of sources to avoid the direct intake of emissions unmixed with ambient air.

The mCERTs calibrated dust monitoring equipment will run continuously during the demolition phase and commence at least 1 month prior to demolition works commencing. The results of the monitoring will be available for review in real time via the monitoring systems cloud-based portal (Insite). The Project Manager, Site Manager and HSEQ Manager will have access to the portal to review monitoring data. These persons will also receive text and email exceedance alerts generated when a trigger level is exceeded.

Where amber levels are exceeded, the Site Manager will, as swiftly as practicable, review the tasks being undertaken, and the controls implemented to mitigate dusts in order to see if improvements can be introduced.

Where red levels are exceeded, the Site Manager shall, as swiftly as practicable, temporarily cease all dust generating activities and carry out an immediate review to ascertain what activity is generating excessive dusts and how the activity is being controlled. Improved dust mitigation measures must be implemented for works to resume. If after a red alert no task can be identified as the source of the alert or the alert relates to activity not related to site operations, the outcome of any investigation shall be recorded in the site environmental monitoring logbook.

Suggested dust level alert setup for real-time monitoring is as follows:

	Air Quality Trigger levels	
Device: Stellifii Noise	1 hr mean	24 hr mean
Scope: PM10	Red - 190 ug/m3 Amber - 150 ug/m3	50 ug/m3

The company name and contact number, in addition to the project hotline will be affixed to the boundary in the event of dust issues. The fixed environmental monitoring stations shall be affixed onsite. Locations identified below.



Mobile dust suppression units and excavator mounted suppression (fine atomised spray) will be utilised to control dust at source, with dust levels are visual monitored. The site boundary will be screened with 2.4 metre timber hoarding.

Haulage roads and vehicles will be maintained as per the requirements outlined within the Construction Traffic Management Plan.

There will be no open stockpiling of aggregates/spoil on site with no intended use or disposal, short term stockpiling may be permitted only were waiting to be recovered or reused i.e., agreed stockpile for future piling matt and dust is adequately controlled.

1.14 Noise & vibration

Calibrated real-time noise and vibration monitoring units will be installed around the site prior to phases of works likely to generate noise/vibration in line with:

- BS 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites - noise';
- BS 5228-2:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites - vibration'.
- Ambient background noise, dust and vibration levels will be ascertained using calibrated equipment installed by our environmental monitoring consultants by taking measurements at the boundary during the day and night in the week prior to mobilisation. These measurements will be used to understand typical existing levels and how these contrast to levels generated throughout the works.
- Given the potential for noise disturbance on this project, an application will be made to the local authority under Section 61 of the Control of Pollution Act 1974
- The stipulated and suggested noise and vibration monitoring levels are:

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Noise Levels	
Device Stellifil Noise	
Suggested amber alert	Suggested red alert
L _{Aeq} 1h Monday - Friday = 75 dB(A)	L _{Aeq} 1h Monday - Friday = 80 dB(A) L _{Aeq} 10h Monday - Friday = 75 dB(A)

Vibration Levels	
Device: Enviroguard NDV	
Suggested amber alert	Suggested red alert
5 mm/s PPV	10 mm/s PPV

- The results of monitoring will be reviewed daily, and the software will instantaneously inform the Site Manager and Project Manager of any exceedances. Where amber levels are exceeded, the works will be reviewed, and controls checked or improved.
- Where red levels are exceeded, works should be ceased temporarily, and the causation assessed to ensure existing or additional controls can prevent reoccurrence. All exceedances will be recorded on the monitoring log.
- Wherever possible and practical, sources of noise and vibration will be mitigated at source i.e., careful placement of machinery, low noise and vibration models, enclosures that reduce transmission potential, avoiding dropping of materials etc. in addition to only undertaking works within agreed working hours stated in this plan and under planning permission. Fixed generators for example in the welfare area potentially required to run outside of agreed hours for security purposes, will be super silenced models and housed in an acoustic enclosure. Generators will be a minimum of 10 meters from the site boundary wherever practical. If it is practical to utilise a diesel/battery hybrid generator (practicality based upon power consumption to feed security requirements) this will be deployed.

1.15 Weather, flooding, and groundwater

Weather forecasts will be monitored daily and Natural Resources Wales flood warnings can be checked at the flowing source <https://naturalresources.wales/flooding/check-flood-warnings/?lang=en>

The Quinn radiators site bounding the NHS site is classified as a low risk of surface water/small waterway flooding, Low means that each year, this area has a chance of flooding between 1 in 1000 (0.1%) and 1 in 100 (1%). This type of flooding can be difficult to predict, much more so than river or sea flooding as it is hard to forecast exactly where or how much rain will fall in any storm.

This is based on the best information available such as ground levels and drainage. On this basis the work area will be monitored during rainfall, and we will liaise with NHS Wales as to extent of any localised surface water flooding. Refer to image 1.15a below.

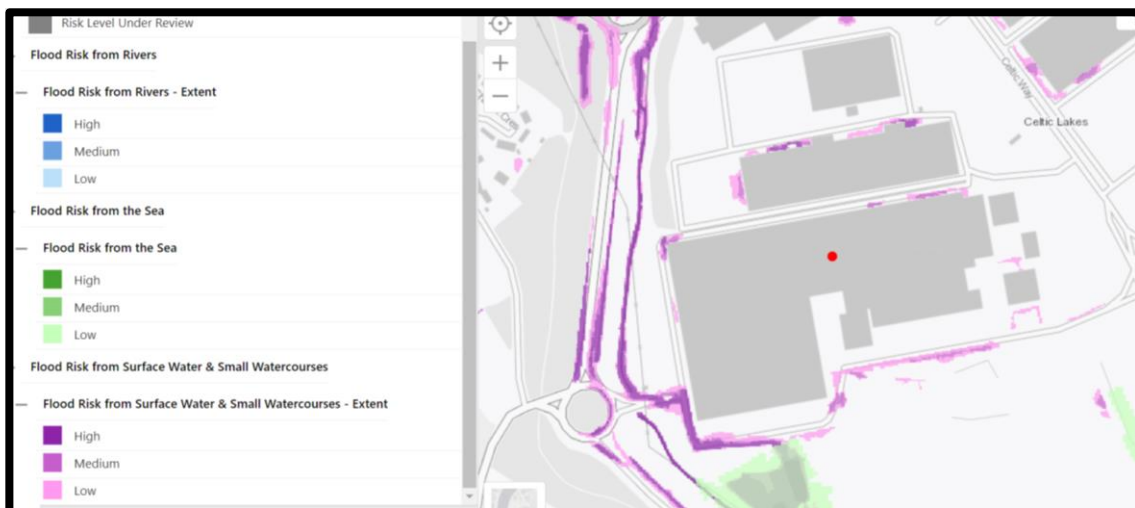


Image 1.15a

All loose materials must be contained (i.e., weighted down, strapped up effectively or placed in enclosed containers) to prevent them being blow around or off site.

1.16 Services inc drains and discharge.

No substances are to be put down site drainage. G3 filter medium will be used if approved by NHS Wales to prevent debris entering retained site drainage systems.

Welfare facilities will be utilised self-contained wastewater tanks.

Refuelling and plant maintenance is to be done in dedicated hard standing areas away from drains.

Machineries will not be positioned over site drainage or underground utilities and will sit on spill mats.

The investigation under Geotechnical Survey – Factual and Interpretative Report comprises of cable percussive boreholes, trial pits, in situ laboratory testing and reporting. A geotechnical and geo environmental interpretation and evaluation of the data obtained was also commissioned as per potential discharge application.

No machine digging around 1metre of borehole points and proper instruments such as vac-ex must be used at the borehole areas mentioned on the drawings.

1.17 Waste Management and Sustainability

Prior to commencement of contract and to satisfy LEED (Leadership in Energy and Environmental Design) the project is to consider all waste diversion opportunities. Typical wastes streams have been assessed so that likely outlets can be identified for maximising diversion from landfill. Estimated tender quantities vs actual project quantities will be updated throughout the project on the dedicated site waste management plan.

Our goal is always to maximise reuse and recycling opportunities and we aim to divert between 95-98% by weight of recyclable waste from landfill. Buildings will be stripped of hazardous materials such as asbestos prior to demolition, Loose furnishings and fixtures will also be recovered by hand to help segregate the maximum number of materials. Waste to landfill is a last resort where no practical option exists.

Typical waste streams have predicted disposal options in line with the following waste recycling targets as predicted by the Client, are indicated below:

50%	100%	100%
<p>All non-hazardous solid construction waste, such as:</p> <ul style="list-style-type: none"> ▪ Masonry ▪ CMU ▪ Lumber ▪ Wood Sheet Materials ▪ Wood Trim ▪ Metals ▪ Roofing ▪ Insulation ▪ Carpet and pad ▪ Gypsum Board ▪ Piping ▪ Electrical Conduit 	<p>Packaging, such as:</p> <ul style="list-style-type: none"> ▪ Paper ▪ Cardboard, boxes ▪ Plastic sheet and film ▪ Polystyrene packaging ▪ Wood crates ▪ Wood pallets ▪ Plastic pails 	<p>Construction office waste, such as:</p> <ul style="list-style-type: none"> ▪ Paper ▪ Aluminium Cans ▪ Glass Bottles

Disposal facilities and transport companies shall be subject to due diligence checks prior to use. No waste is to be collected, moved or deposited at facilities until waste management/treatment licences have been verified. Waste must only be moved under a controlled waste note with all transfer and consignment notes retained for full tractability.

Open top skips are to be avoided and loads sheeted before leaving site. Waste should be removed from site as soon as is practical.

Excavations and voids formed following the demolition and removal of slabs and foundations will be backfilled and graded where practical utilising site won aggregates to avoid unnecessary transportation and import of virgin or reprocessed aggregates. Where site won materials are reused, use will require application of a U1 exemption (or material management plan if outside of 5000t permitted allowances).

All timber used for protecting services or hording lines is to come with FSC chain of custody/certification.

Where vegetation/poor condition trees are removed in agreement, we will look to accredited replanting schemes within the local area to replace lost vegetation and carbon capture.

Smoke detectors and fluorescent lighting pose a risk to health due to the hazardous materials contained within them. These items must be collected carefully via MEWPS or scaffold towers keeping them intact where they will be stored in dedicated containers for collection by a specialist contractor.

1.18 Vegetation/wildlife

The site is rectangular in shape and covers an area of approximately 16.59 ha. and comprises of a redundant radiator manufacturing site with associated areas of hard standing for roads and parking and areas of soft landscaping comprising mostly short field grass, bushes, and mature and semi mature trees around the perimeter. Asphalt roads and vehicle parking and grassed areas with shrubs and scattered trees are present towards the periphery of the site mainly to the south and east. As the site is also neighboured by fields and therefore the likely hood of pests/local wildlife is considered. All Ecological reports to be reviewed in full when received.

1.19 Ozone depleting substances (ODS)

- 1) Air conditioning systems will be drained of all refrigerant gasses, including any ODS F-gas, by specialist approved contractors and will not be allowed to escape to atmosphere. A certificate of compliant recovery will be provided, and all its operatives must hold relevant degassing competency. Proper duty of care should be adopted while disposing off the CFC foams found onsite.

1.20 Light pollution

It is foreseeable that during winter months where natural lighting is diminished, visibility may be reduced. Therefore, minimal temporary artificial lighting may be introduced purely on the grounds of safety and will be angled and screened to retain light within in the site. CCTV with night vision will be utilised out of hours to avoid having to illuminate the grounds.

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1.21 Odour

Should excavation uncover odorous materials, works shall stop and deodorising misting unit's agents introduced to site to mitigate the odour. 'Sniff testing' in line with CGMS F346 and Environment Agency guidance H4 'Odour Management' will be undertaken by the Site Manager.

1.22 Enquiries, complaints and non-conformance

Enquiries about site

Queries raised will initially be managed by the Site Manager who will aim to resolve the query amicably at a local level. The Site Manager will update the project query log with the relevant details and inform the Project Manager & Health, Safety, Environment & Quality (HSEQ) Manager.

Where the query cannot be resolved at a local level, it will be escalated and the Project Manager or appointed public relations team will contact the individual (if known) to discuss the query and attempt to resolve. The Project Manager or public relations team will update the query log with the additional details.

Where the query still cannot be resolved, it will be escalated to the Project Director who will oversee resolution.

General - All complaints will be taken seriously and dealt with as soon as practical in a professional and courteous manner in line with CGMS P066 'Complaints' See image 1.23a below.

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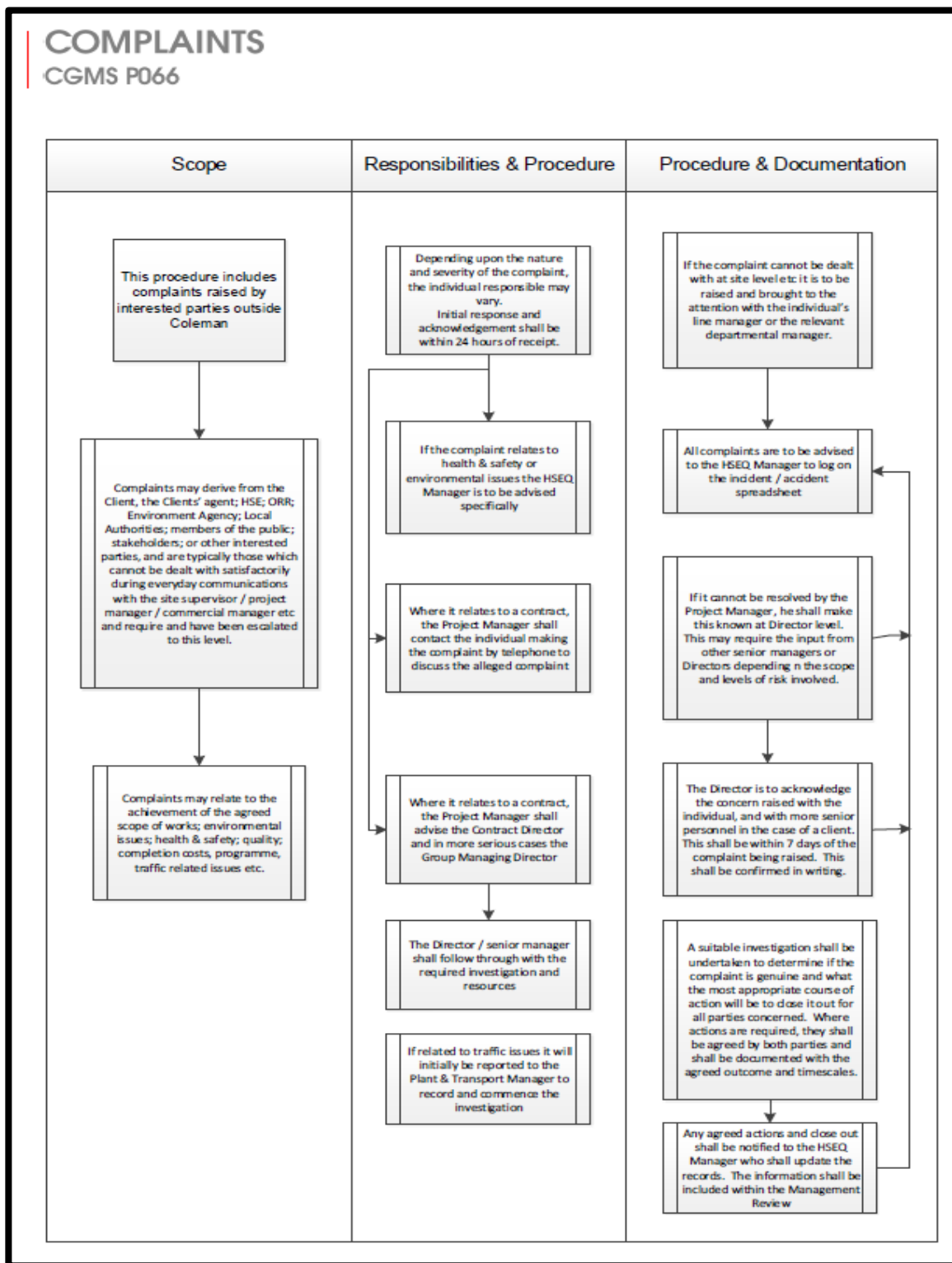


Image 1.23a

A contact log will be maintained throughout the project for ensuring all queries, complaints and actions are tracked and all relevant parties are kept informed.



Contact raised through head office will be handled and directed by the public relations team. At the earliest possible convenience, the public relations team will assess the nature of the contact and allocate and escalate. The public relations team will update the project contact log with the relevant details.

Security remain on site 24/7 to deal directly with any direct issues or complaints. In the event of an emergency, they will notify the appropriate emergency services and Coleman project team.

Please note - members of the public and local residents are encouraged to raise queries, complaints through the aforementioned means. However, out of hours emergency scenarios should always be raised with the relevant authorities or public services.

Non-Conformances

Where a complaint is validated as genuine and identifies gaps in the application of control measures or a failure to adopt best practice, the case will be investigated by the HSE Lead, and a non-conformance report raised in the interests of preventing a reoccurrence. All non-conformances will be logged on the company non-conformance register.

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Appendix A - Quality Management Plan (QMP)

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Appendix B - Demolition, Health and Safety Plan (DHSP)

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Appendix C - Construction Traffic Management Plan (CTMP) - Demolition Phase

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Appendix D - Tree Protection Plan (TPP) - Demolition Phase

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