

Jersey Wharf

Construction Environmental Management Plan

Planning Conditions 7 & 11

Rev 2a – 16th February 2023



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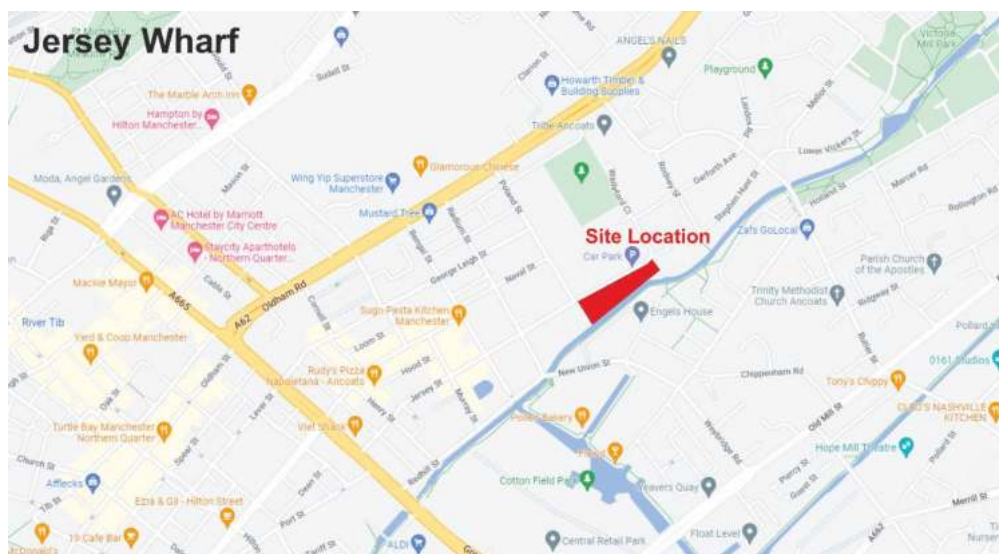


Introduction

Whilst this CEMP covers the works to Jersey Wharf, it should be noted that both the Eliza Yard and Jersey Wharf Developments will be delivered at the same time by the same contractor in an effort to minimise the site footprint and reduce impact on local community.

Works: Construction of 190nr new build dwellings alongside new commercial space across 8nr storeys including all associated external works.

Location: Jersey Street, Ancoats, Manchester, M4 6JW



This document specifically targets and mitigates the issues presented from the construction of the proposed development and the associated works. For ease of reference these are separated into specific elements and covered individually.

Project Team

Client	Manchester Life Development Company 3 Ltd
Project Manager	MACE Ltd
Architect	Buttress Architects Ltd
Structural Consultant	Curtins Ltd
M&E	Buro Happold Ltd
Landscape Architect	Planit I.E. Ltd
Quantity Surveyor	Turner & Townsend Cost Management Ltd
Acoustician	Sandy Brown Associates LLP
Fire Consultant	Hoare Lea LLP
Transport & Traffic	Hydrock Ltd
Principal Designer	Buttress Architects Ltd
Planning Consultant	Deloitte LLP
Party Wall	GIA North LLP

Emergency Contact Number

EWC Project Manager	Tel: TBA
	Tel: Head Office 01772 698822



This document specifically targets and mitigates the issues presented from the construction of the development and the associated works. For ease of reference these are separated into specific elements and covered individually.

Project Programme

Site Commencement	October 2023
Project Completion	April 2026

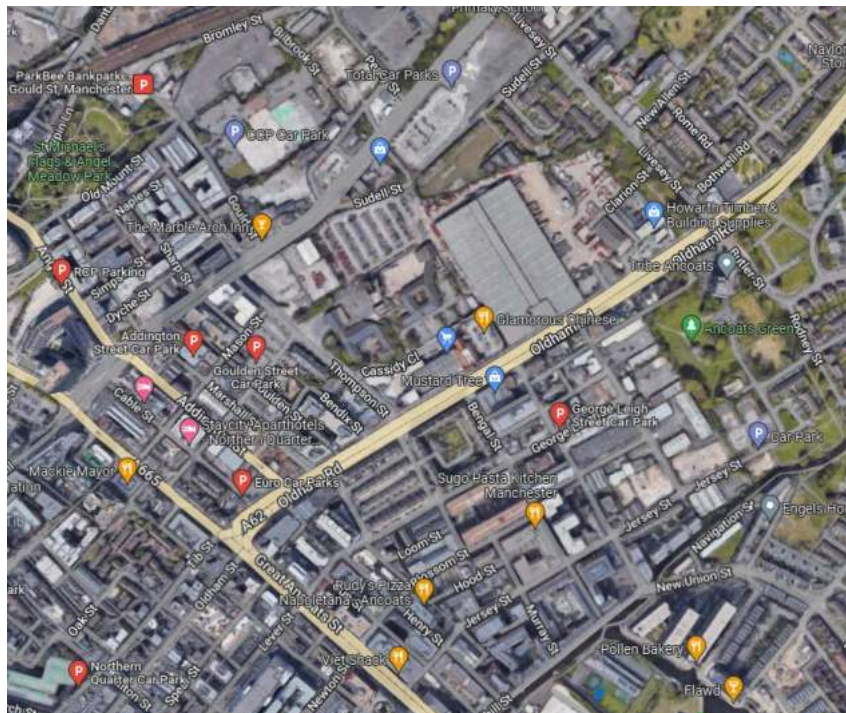
Site Working Hours

It is proposed that site construction activities will be carried out during the following hours:

Monday to Friday	Site Open 7.00 till 18.30 Site Working hours 8.00 till 18.00
Saturday	8.30 till 17.00
Sunday	No work unless with prior arrangement and subject to proposed site activities.

Visitor and Operative Parking

With the site being extremely restricted there will be some onsite parking for Management, but there will no onsite parking for Visitors or Operatives vehicles, staff will be required, if travelling by private car, to use existing car parking facilities within the area;



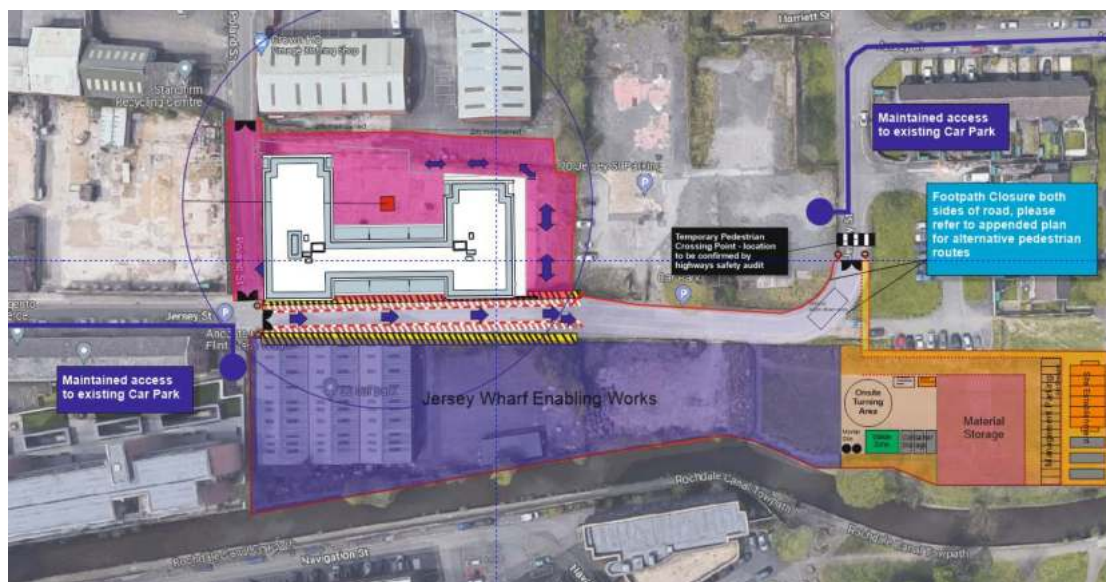
Prior to the placement of orders with our supply chain we will make them aware of the site restrictions, particularly the parking restrictions around the site.



Pavement & Road Closures

In order for EWC to safely facilitate the works we will have to implement the temporary closure of Jersey Street & a section of Poland Street subject to agreement with Highways, this will also involve the closure of access for pedestrians.

The plan identifies our current proposals, these will be agreed with highways prior to commencement of the onsite works.



We have identified a couple of alternate routes for pedestrian access during the works, this will be developed with Manchester Highways Officer, the diverted route will have agreed signage installed advising of the proposed agreed diversion route and will be audited weekly to ensure signage is maintained throughout the duration of the diversion ;



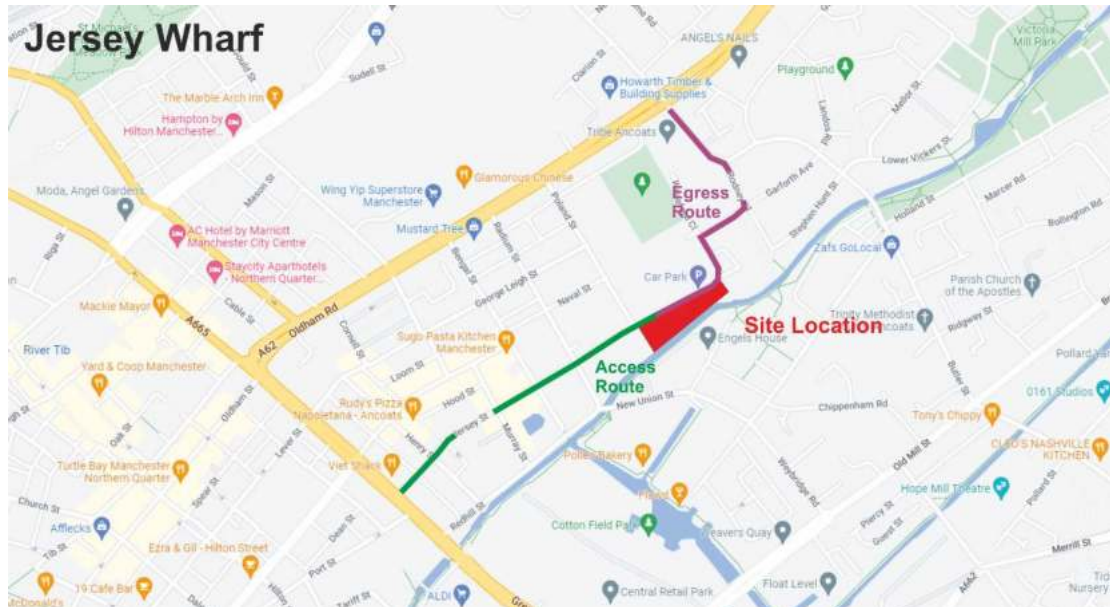


HGV Routing Plan & Material Deliveries

Access Route; Our proposal is to route vehicles from Great Ancoats Street up Jersey Street entering the site through the road closure on Jersey Street.

Egress Route: Vehicles will then exit the site continuing along Jersey Street and then onto Rodney Street and Butler Street existing then onto Oldham Road.

Vehicles will enter site immediately and gates will be manned to ensure no deliveries are kept on



the highway. All subcontractors will be required to produce a procurement schedule for their materials which will be monitored at their weekly/fortnightly meetings and must book delivery slots with our Logistics manager. Efficient and accurate scheduling of deliveries will minimise storage capacity required, double handling and congestion around the site and surrounding roads and highway infrastructure.

The above access and egress route will be further developed and subject to agreement with Highways.

Movement of traffic to and from site will be restricted and controlled at sensitive times, (to be developed and agreed with Highways designated representative) and in any event deliveries will be programmed so as not to conflict with peak periods of the day.

We will utilise a booking in system so site is ready to receive deliveries and bring them immediately within the site boundary upon arrival.

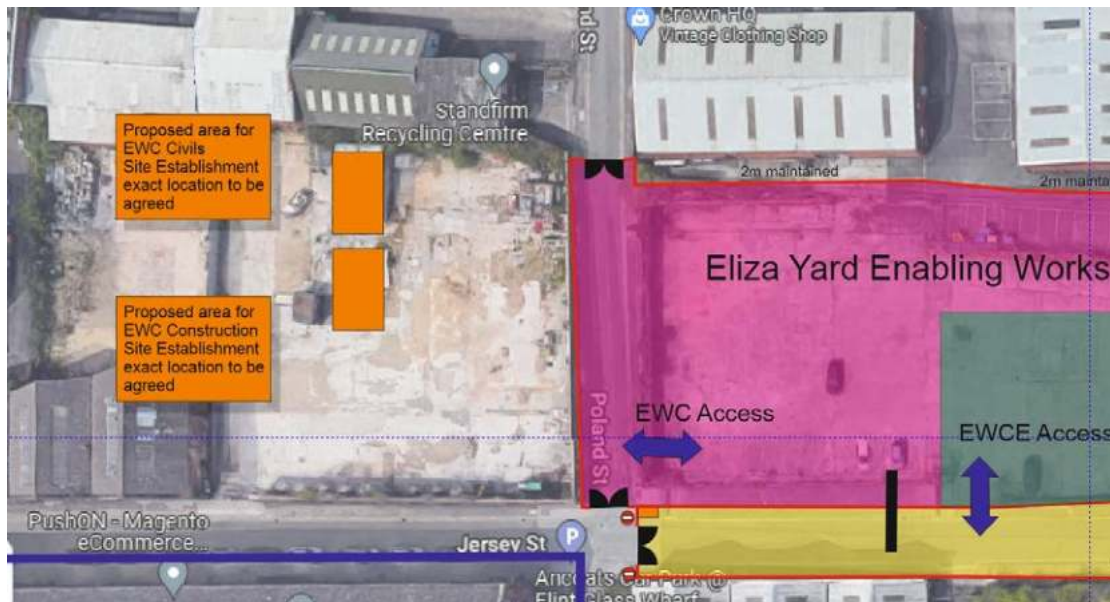
Site storage of materials and plant will be very carefully controlled by restricted allocation of zones to particular trades, these will be in segregated storage areas the exact details will change dependent upon each phase of the development and these details will be included within our onsite Health & Safety Plan.

- Order the amount of materials we need as accurately as possible
- Arrange for 'just in time' deliveries to reduce storage and material losses
- Consider the source of materials.
- Consider the packaging used for materials delivered to the site -can this be reduced or recycled
- Ensure that deliveries are rejected if damaged or incomplete
- Make sure storage areas are safe, secure and weatherproof (where required)
- Store liquids away from drains, burns and in bunded areas to prevent pollution.

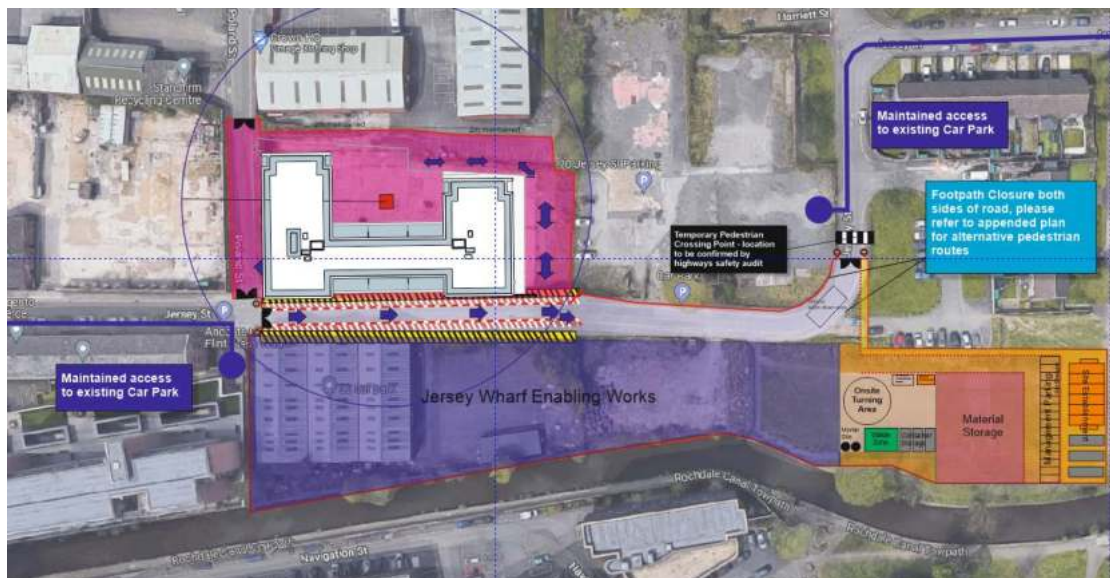
Site Accommodation and Pedestrian Access

The project will be split into two main phases;

Enabling Works: The site accommodation will be located within the site bounded by Poland Street and Jersey Street



Construction Works; We are proposing the location of the site accommodation to be on the land at the end of Jersey Street;



This will provide the following facilities; Toilets, Drying unit, Canteen, Store, Meeting rooms, PM's office, QS office, open office, Toilet Facilities and Kitchen facilities. There will be a small amount of site cabins provided onsite for toilet facilities.



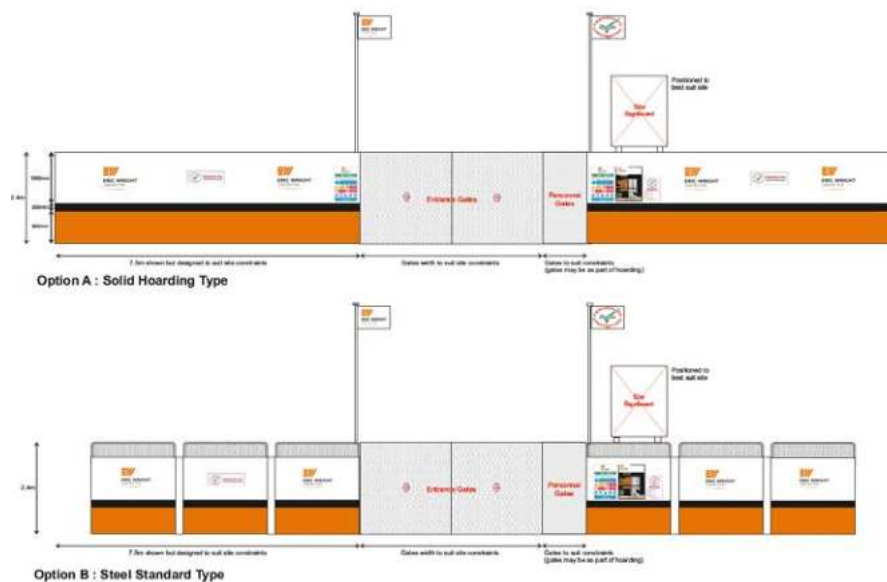
We will have biometric turnstiles to ensure that only inducted management and site operatives can access the site. The operative access points will be from Jersey Street.

Erection and Maintenance of Security Hoarding

We will erect a 2.4m timber hoarding to the perimeter of the site.

Emergency contact details will be displayed on the hoardings at the main entrance points to site and at regular intervals around the site.

All hoardings will be visually inspected daily and maintained accordingly. The main entrance to the site will be branded as per the EWC hoarding standards (see below). This helps distinguish EWC sites from others and gives delivery drivers a point of reference. The main hoarding surrounding the site will be branded in accordance with the Clients Branding.



Internal access routes and storage compounds will be segregated utilising Heras type fencing panels or pedestrian barriers as appropriate.

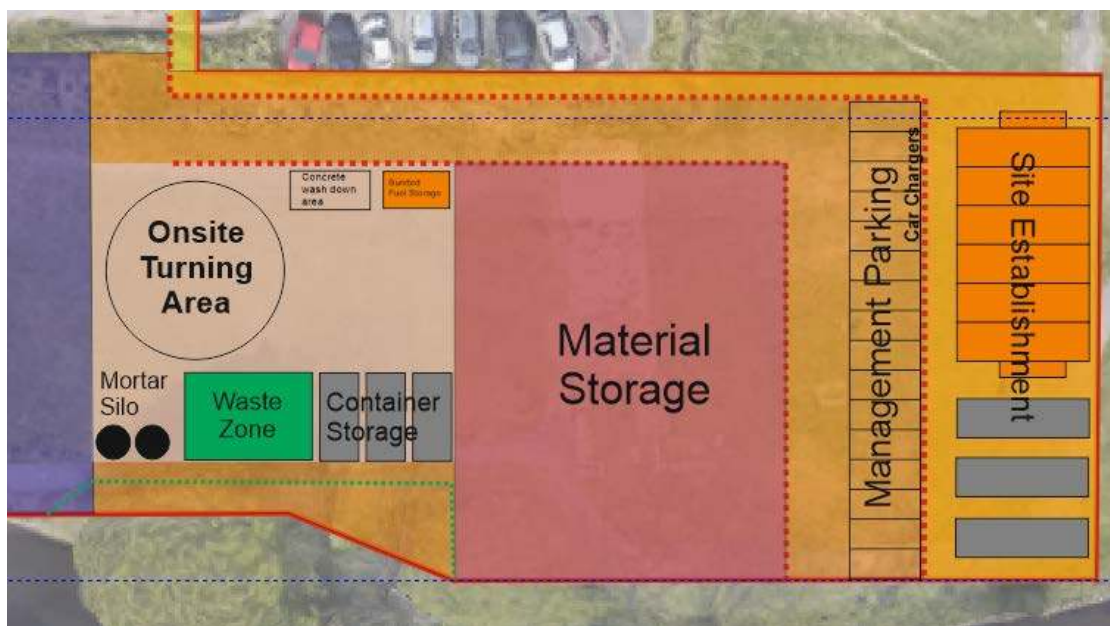
Enabling Works

There will be an enabling works package which will involve early drainage works (involving the construction of new manholes to service the site) disconnection of existing services, removal of existing slabs, foundations, archaeological investigation works in accordance with the agreed WSI and a full remediation of the site prior to commencement of the main site works all carried out as per the site plan identified;



Storage of Plant, Materials and Fuel

Site storage of materials and plant will be very carefully controlled by restricted allocation of zones to particular trades. We have identified a small amount of storage area by the hoist location and will be further develop with detailed plans of the site will be drawn up outlining areas available for moving and storing materials during the various stages of the contract prior to site commencement.



We have identified an area for the storage of material externally, this will be kept to a minimum with materials being brought to site in a just in time basis so as to minimise storage requirements. Materials will also be stored inside the building for the finishing elements of the build.

Wherever possible materials will be delivered shrink-wrapped and palletised to be unloaded and distributed safely by crane or hoist. Diesel fuel for site plant will be stored in sealed tanks inside bunded walls with a minimum of 110% of the capacity of the tank. The use of diesel driven plant and equipment will be kept to an absolute minimum. Wherever possible equipment and plant will be electrically powered to reduce noise and prevent emissions.



Waste Management (Recycling/Disposal)

An important part of the site management process involves site cleansing, rubbish removal and recycling. We have produced an initial Site Waste Forecast Dashboard which details our initial waste forecast.

Measures of how we intend to reduce, re-use, recycle and manage site waste include;

- Ensure that all material removed from site is taken to waste recycling stations and separated for recycling
- Records of the waste recycling will be provided by the recycling stations.
- Enforcing good housekeeping measures e.g. proper storage of materials to minimise spillage.
- The use of raw materials as per manufacturer's instructions.
- Monitoring the generation of waste in order to identify trends and areas for further investigation.
- Identifying recyclable and salvageable materials and where feasible find secondary or alternative uses.
- Segregate waste types to facilitate recycling activities.
- Working with suppliers / subcontractors to minimise surplus material delivered to site.
- Working with suppliers to ensure only the necessary minimum of packaging is used.
- Consideration of alternative materials with lower wastage levels.
- Ensuring that all Duty of Care and other legal requirements are complied with during the disposal of wastes
- Consulting with suppliers to determine correct / appropriate disposal routes for waste products and containers.
- Assessing the project design to identify ways in which waste generation can be minimised through raw material
- Identify how wastage from temporary and permanent works activities can be avoided and minimised.
- Setting waste reduction targets as well as educating and informing site staff.
- Reducing usage of diesel, electricity and water on site by adopting good practices and Management procedures.

The responsibility of updating the Waste Forecast Dashboard belongs to the EWC Project manager.

Noise, Dust & Vibration Control

Noise Control

In general, the construction phase can be viewed as intense activities of work over a short timescale.

These construction processes involve concentrated activities in a localised area.



Construction methodologies should be made as efficient as possible to minimise noise impacts to local residential areas and offices. Additionally, every opportunity should be taken to provide 'temporary' screening where it is likely to provide effective mitigation. In places where screening is recommended as part of the traffic noise mitigation plan, the early installation of these screening measures where practicable would also reduce the construction noise levels considerably.

Locations closest to the scheme are likely to be subject to the highest construction noise levels, although this will depend on topography and existing infrastructure providing natural screening. The level of impact would also vary considerably, dependent on the current ambient noise levels for given areas. Where properties are already subject to significant road traffic noise, the impact from construction noise will be less than those areas which are set further back from existing road transport corridors.

Vehicles when removing or bringing materials to site will be sheeted.

All measures to minimise construction noise would be taken according to best practicable means, as described in the mitigation measures section.

A more detailed Noise Assessment will be carried out by the Environmental Coordinator upon commencement and at regular intervals throughout the construction process.

Surrounding Area



The most sensitive receptors surrounding the site are;

- North** – Eliza Yard Site and Car Park
- East** – Site Establishment and Green Space
- South** – Canal and Apartments
- West** – Flint Glass Works – Offices/Apartments

Construction methodologies will be made as efficient as possible to minimise noise impacts to surrounding areas.

All measures to minimise construction noise will be taken according to best practicable means, as described in the mitigation measures section.



A more detailed Noise Assessment will be carried out by the Environmental Coordinator upon commencement and at regular intervals throughout the construction process.

All operatives will be given a site induction and briefed on the environmental risks that our construction activities pose to the surrounding water courses, with regular toolbox talks being given on the correct use of spill kits, wash down areas etc.

Mitigation Measures

The noise impact of the construction phases can be minimised by use of the noise control measures, as suggested in Section 8 of BS 5228-1:2009. General principles for the control of noise during the construction works are presented below.

- Appropriate choice of plant and equipment;
- Regular plant maintenance to keep plant in good working condition and reduce noise from machinery;
- Careful phasing of the proposed operations; and
- Provision of temporary barriers.

The site staff will be utilising methods of mitigation outlined, alongside regular monitoring and utilising feedback from residents.

This regular noise monitoring will be carried out by the Environmental Coordinator. This may be substituted by sub-contractors noise readings as stated in their method of work.

Operating Methods of Noise Reduction

Ensure that all staff and operatives are briefed on the requirement to minimise nuisance from site activities, this will be mentioned within the site inductions, a programme of toolbox talks and all method statements. Any significant changes in numbers of workforce on site will force a review of the monitoring programme.

No equipment shall operate other than at the manufacturers' rated working levels; site staff shall not 'rev' equipment unnecessarily.

Use of machine based equipment on site shall be kept to an absolute minimum and only silenced or sound models shall be used.

No plant and equipment shall be left running if not required for immediate use. Where this is not practicable, equipment shall be set to idle in the quietest manner to minimise noise emissions.

Resilient materials will be used where possible to reduce impact noise where materials are being moved or dropped e.g. lining chutes and dumpers. Materials will be lowered whenever practicable and otherwise drop heights will be kept to a minimum.

Noise Reduction of Mobile Plant

The movement of plant onto and around the site will have regard to the normal operating hours of the site and the location of any noise sensitive receptors. Audible reversing alarms will be of a type, which whilst ensuring that they give proper warning, have a minimum noise impact external to the site.



Internal haul routes will be well maintained and avoid steep gradients.

Earth moving plant will be fitted with efficient sound reduction equipment and manufacturers' enclosure panels will be kept closed.

Location of the site compound is located to minimise the noise impacts of delivery vehicles on unmade ground.

Noise Reduction of Stationary Plant and Tools

Noise reduction measures for tools are as follows:

- Use of hydraulic or electric tools where possible;
- Use of alternative quieter equipment for concrete breaking/cutting;
- Fitting suitably designed sound reduction equipment to reduce noise without impairing efficiency;
- Use of damped tool piece or saw blade;
- Enclose in a suitably designed portable or fixed acoustic enclosure with suitable ventilation (with due regard to the health and safety of operatives).

These measures will be considered for selected where appropriate by the Site Manager.

Control of Noise Propagation on Site

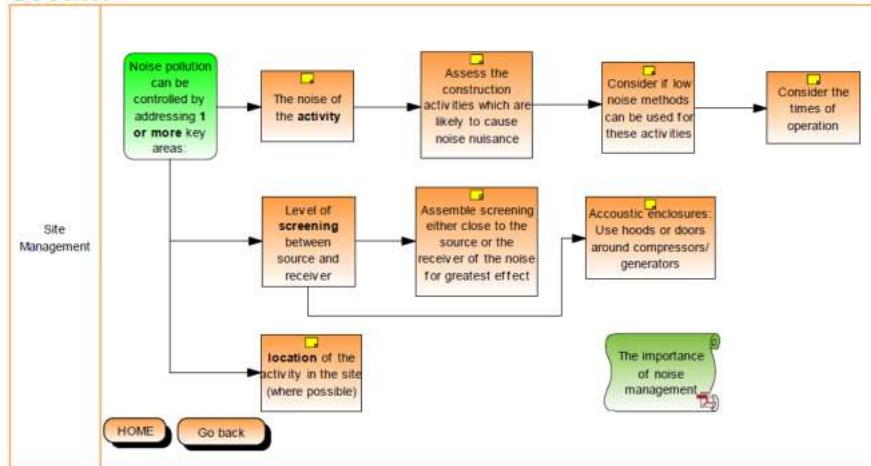
Temporary acoustic barriers, such as hoardings or mounds when positioned close to the source or the receiver will assist in the reduction of noise levels experienced at nearest receivers. The degree of protection will be limited to 5-10dB(A) and care must be taken to avoid reflecting noise and increasing the problem elsewhere

Barriers should be:

- A fairly uniform panel, free from holes with no gaps or openings at joints (uneven ground may leave gaps to be filled);
- Stable and robust enough to stand up to site conditions;
- Of a height and width more than enough to completely cut off sight of the source from the receiver, and
- Preferably at right angles to the line of sight of the receiver.

Further Noise Guidance

- BS 5228 -1:2009 'Code of practice for noise and vibration control on construction and open sites – Part: Noise'
- Eric Wright Sustainable Construction Toolkit (saved on the Wrightway electronic project file):



Dust Control

The control of dust arising from the construction works will be controlled in a number of ways depending on the work source causing/providing the dust and the timing/stage at which the construction works are at.

Permits will be obtained from the EWA prior to any crushing of materials onsite.

Dust Assessment

Environmental risk assessments are completed for every contract and particular attention is focused at statutory nuisance. Dust monitoring will take place twice a day in line with the control methods detailed in the risk assessment. Records of this will be maintained on site and available on request. If excessive dust levels are reached, works will be temporarily suspended whilst the Environmental Coordinator is consulted and further appropriate dust measures are implemented to enable works to recommence. This will be recorded.

Additional dust monitoring will be carried out by Eric Wright Construction Environmental Coordinator on a regular basis. Control methods as necessary will be identified.



Mitigation Measures

Measures that may be taken include, but are not limited to:

Haulage Routes, Vehicles and Construction Plant

Potential dust Source	Control Measure	Responsibility for implementation
Haul roads and traffic routes	Scheduled deliveries to avoid standing traffic on routes to site	Project Manager
Vehicle waiting areas and hard standing	Vehicles will be directed into site and unloaded. If waiting is required engines will be switched off	Gateman/Traffic controller
Vehicle and wheel washing	Wheel washing facilities easily available and signed. Gateman to be responsible.	Gateman/Traffic controller
Site traffic	Speed restrictions will be in place including signage and managed by site personnel to avoid back up	Gateman/Traffic controller
Public roads	Gateman/Traffic controller to be aware of scheduled deliveries and coordinate traffic and operations affecting access	
Road cleaning	Road sweeper to be employed on a daily basis for cleaning access roads to site. These operations will be increased when critical activities occur	Gateman/Traffic controller
High level walkways and surfaces (Scaffolding and others)	Operatives will be briefed at induction to the requirements of dust control and suppression	Project Manager

Static and Mobile Plant Emissions

Potential dust Source	Control Measure	Responsibility for implementation
Visible exhaust smoke	All standing/waiting traffic to have engines switched off. All plant brought to site to be well maintained and suppliers advised of this at order stage	Project Manager
Maintenance	All plant and equipment to be maintained off site	Project Manager
Servicing	All plant and equipment to be serviced off site	Project Manager
Operating time	All operations will be conducted in line with the planning conditions and all sub contractors being made aware of restrictions at order stage	Site Team
Exhaust time	Operating plant to be monitored to ensure it is not left running unnecessarily	Project Manager
Exhaust direction and heights	Exhausts from plant will be in line with manufacturers specifications and directed from ground to atmosphere	Project Manager
Location of plant and equipment	Plant and equipment operating close to other businesses and sensitive receptors will be kept to critical activities only.	Project Manager



Surfacing and Coatings

Potential dust Source	Control Measure	Responsibility for implementation
Bitumen over heating	Control of tar boilers. Ensure equipment is in good working order	Project Manager
Fume Production	Ensure protection is in place at all times while heating or maintaining heat	Project Manager
Small accidental fires	Have emergency procedures in place and brief at induction and toolbox talks. Monitor RAMS	Project Manager
Housekeeping	Monitored through regular inspections	Project Manager
Direct application of open Flames (torching)	Avoid overheating and keep to a minimum	Project Manager

Material Handling

Potential dust Source	Control Measure	Responsibility for implementation
Material Handling operations	Handling and movement of materials to be kept to a minimum through planning	Project Manager
Transport of powdery materials	Loose materials to be moved in containers or remain wrapped until use	Project Manager
Transport of aggregates	Use enclosed or sheeted vehicles	Project Manager
Handling areas	Keep areas clean and free from dust	Project Manager
Vehicle loading	Use methods that minimise the creation of dust. Damp down with water	Project Manager
Filling Skips	Use enclosed skips where possible	Project Manager
Reducing the spread of dust across the site	Use damping down methods	Project Manager

Storage of Powder Materials

Potential dust Source	Control Measure	Responsibility for implementation
Bulk Cement	To be delivered and stored in tankers/silos	Project Manager
Silos	To be kept in good condition. Regular checks for damage	Project Manager
Accidental spillage when filling or operating silos	Emergency preparedness plan in place identifying R+R	Project Manager
Dry materials > 3mm	Storage to be kept to minimum. Use materials at point of delivery	Project Manager
Dry materials < 3mm	Storage to be kept to minimum. Use materials at point of delivery	Project Manager
Storage	Store materials away from site boundaries and sensitive receptors	Project Manager



Stockpiles

Potential dust Source	Control Measure	Responsibility for implementation
Stockpiles	Stockpiles will be kept away from sensitive receptors and kept to a minimum; damping down systems	Project Manager
Building stockpiles	Ensure any stockpiling is done so that the angle of repose is not such that slippage will occur	Project Manager
Short term stockpiles	Ensure that these are kept to a minimum and avoided by use of material at source	Project Manager
Long term stockpiles	Ensure that these are kept to a minimum and avoided by use of material at source	Project Manager

Site Establishment and Restoration on Completion

Potential dust Source	Control Measure	Responsibility for implementation
Earthworks	Will be completed in sections to minimise over exposure and as programme phasing.	Project Manager
Completed earthworks	To be reinstated as soon as possible in line with programme	Project Manager
Storage mounds	Any mounding will be sealed	Project Manager
Landscaping	To be in line with programme and design. No screening to be on site	Project Manager
Transitory soil mounds	Not required	Project Manager
Crushing and screening	Crushing and screening operations to be kept away from sensitive receptors. Ensure compliance with the EPA 1990	Project Manager

Construction and Fabrication Process

Potential dust Source	Control Measure	Responsibility for implementation
Cutting, grinding, drilling, sawing etc	Consider prefabrication to avoid cutting. Quality checks to prevent errors and re-work. Use dust suppression sprays. Use exhaust ventilation. Robust design to prevent cutting	Project Manager
Dust control exhaust ventilation	Always use diamond cutting blades and water sprays	Project Manager
Cutting roads, pavements, blocks	Always use diamond cutting blades and water sprays	Project Manager
Angle grinders	Always use diamond cutting blades and water sprays	Project Manager
Mixing of granular materials	Use pre mixed materials. Mix under controlled conditions. Store dry powder materials in a safe dry environment	Project Manager



Internal and External Finishing and Refurbishment

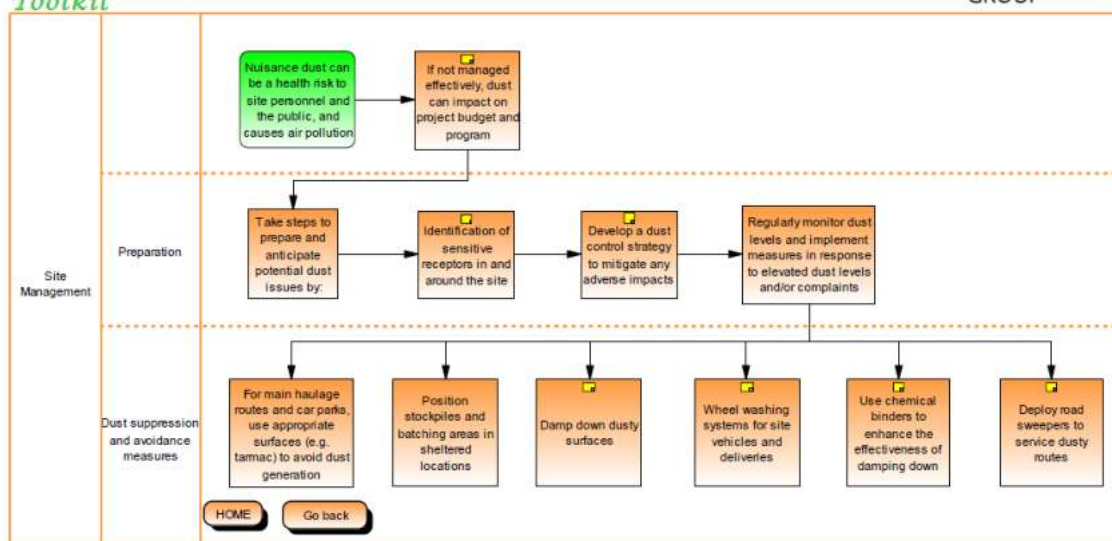
Potential dust Source	Control Measure	Responsibility for implementation
Painting and decorating	Use of suppression or extraction equipment should be used. Vacuum cleaning where possible	Project Manager
Plastering rendering, finishing and fitting out	Housekeeping to control dust related activities	Project Manager
Electrical plumbing systems requiring chasing into walls	Use of suppression or extraction equipment should be used. Vacuum cleaning where possible	Project Manager
Fire proofing and insulation	Use of suppression or extraction equipment should be used. Vacuum cleaning where possible	Project Manager
Cleaning	Avoid dry sweeping use vacuum control where possible	Project Manager

Further Dust Guidance

‘The Control of Dust From Construction and Demolition Activities’ document (BRE, 2003)

- Eric Wright Sustainable Construction Toolkit (saved on the Wrightway electronic project file):

Sustainable Construction Toolkit



Light Control

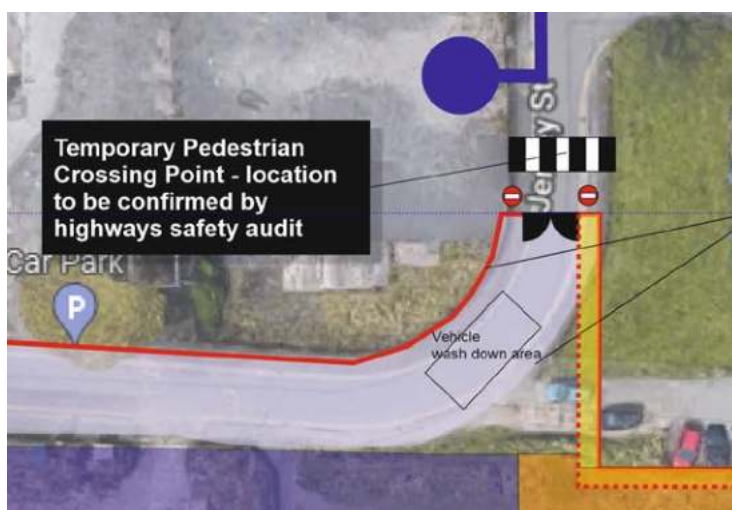
Lighting must be able to provide safe working conditions for staff, and therefore the following measures will be put in place when situating & using site lighting.

- All lighting will be situated in such a manner as to provide as much lighting as is necessary for the work & no more, thereby reducing the risk of light pollution & the use of unnecessary numbers of generators.
- The lights will face downwards/sideways so that they do not shine into any nearby premises (particularly the residential receptors).
- Appropriate selection of innovative site lighting methods e.g. LED to improve the energy efficiency of the site and minimise the spread of the light beyond where required

Wheel Washing (prevention of Silt-laden run-off)

Eric Wright Group Ltd ensures that the working machinery, plant & vehicles, which may have the potential to cause an excessive dust or mud problem onto the public highway, will have the facility to wash down. This will be placed at a strategic point near to the road exit of the site, to prevent the mud being carried on to the road, with the addition of a road sweeper.

Site confines preclude the use of a permanent washdown station. We have allowed for daily attendance from a road sweeper during the Site Enabling, Piling and Ground works vehicles are entering and exiting the drop off zone we will employ a dedicated operative and plant (jet wash) to clean vehicles wheels prior to leaving site, we will supplement this with the use of a truck mounted road sweeper.



The wheelwashing method has been determined to the contract requirements. In this case as on the other Projects a spray gun is seen as sufficient as below. The gateman will manage this.



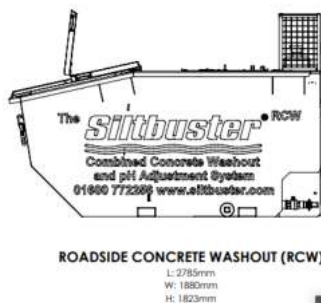
Should drive-on wheel washes be required following further dust assessments and/or resident feedback this facility will be installed. This water from wheel washing facilities and wash down areas is contained and not allowed to soak into surrounding ground. The used water is channelled to a containment tank. Water from a wheel wash is to be recycled and reused.



Concrete Wash Down Area

A silbuster (or similar) concrete wash down facility will be installed in a location at the egress point from site, this self-contained treatment system will enable water to be treated, stored and re-used for wash down purposes;

- Effectively capture the concrete wash water and associated aggregate
- Aggregates are retained and any bleed waters and fine material are captured in the low-level tray
- The alkaline waters weir out of the tray and will finally be stored, in a fully automated process, in the grey water storage tank for reuse
- A digital pH controller constantly monitors the pH of the water, automatically neutralising the wash water with carbon dioxide (CO₂) to reduce the pH, removing risk to both the environment and to any operators
- The treated grey water can be reused via the integrated pump and hose
- Multi-functional with a tiny footprint and easy to transport and operate (can be shipped via conventional pallet networks)
- Enabling contractors to easily follow best environmental practise



The exact location of the concrete wash down area is to be determined.

Any on site surplus water discharge required will be discharged into the foul sewer network subject to the appropriate licences being obtained, and agreeing the maximum discharge rates with LCC LLFA

Road Sweepers

Road sweepers will be used as required to keep hard standing areas free from build up as much as reasonably practicable. All collected build up will be tipped off site.

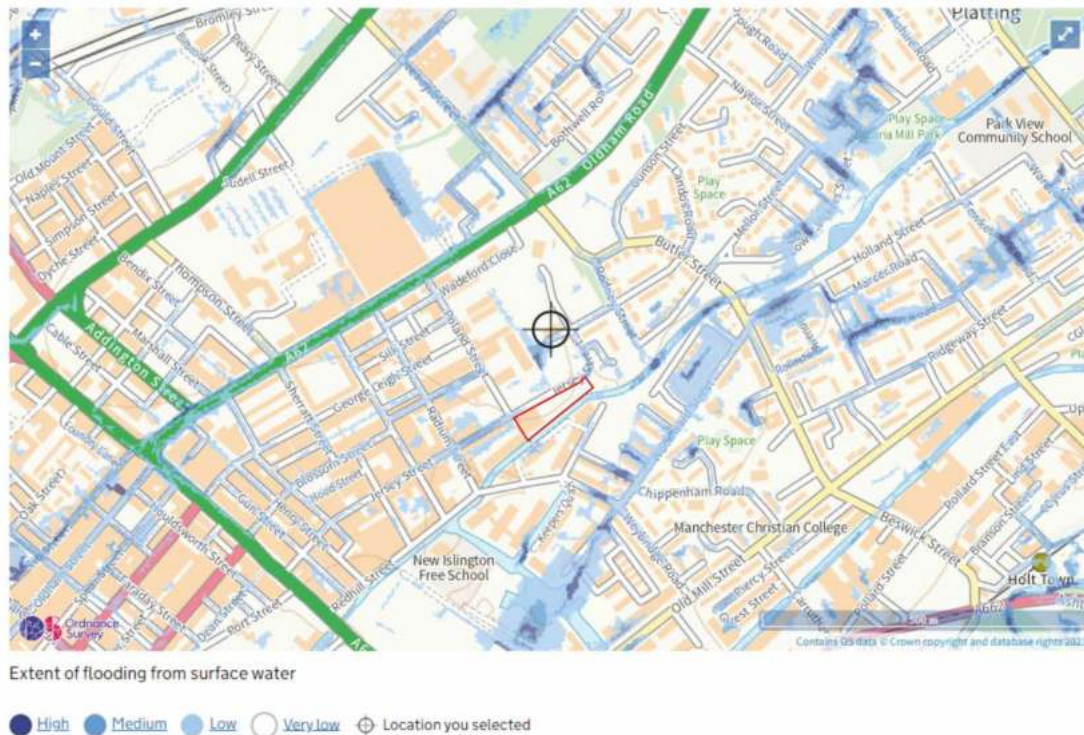
Construction of the new drainage system following the enabling works

It is our intention to construct the new drainage system as early as possible during the construction period, so that surface water from the roofs and hardstanding's are discharged into the new systems as soon as is practicable in the construction programme.

Flooding & Weather Alert

Eric Wright Group Ltd Project Management Project Manager and Site Managers sign up to the Environmental Agency flood warning system <https://www.gov.uk/sign-up-for-flood-warnings> if the site is within a flood medium or high risk.

Based the Environment Agency Flood Zone Map, as presented below, the Site is located within Flood Zone 1 (less than 1 in 1000 annual probability of river or sea flooding in any year) which is defined as having a low probability of flooding in the Planning Practice Guidance to the NPPF.



River Flooding

There are no rivers or watercourses within close proximity to the site considered to pose any significant flood risk.

- The Rochdale Canal is located along the southern boundary of the site.
- The Ashton Canal is located approximately 500m to the south of the site.
- The nearest main watercourse is the River Irk and is approximately 1000m to the North

Canal Flooding

- The nearest canal to the site is the Rochdale Canal located along the southern site boundary.
- The canals are identified in the Manchester SFRA as not generally posing a direct flood risk as they are a controlled water body. Therefore, the residual risk of canal flooding is usually associated with lower probability events such as overtopping and/or the breaching of embankments.
- The Canal Flood Mapping within the Manchester SFRA indicates that the site is not located within a Canal Overtopping Hazard Zone or Canal Breach Zone.
- Given the above information, it is considered that there is low risk of canal flooding to the site.



Historical Flooding

No historic records of flooding for the site were received at the time of writing this report.

Summary of Flood Risk

From the evidence collated and subsequent negotiations the site can be found to be at very low risk of flooding from all sources at present. The installation of a positive drainage network will mitigate any flood risk associated with increasing the impermeable area.

For further information in relation to the Flood risk please refer to the Flood Risk Assessment prepared by Curtins 077879-CUR-XX-XX-RP-C-92000 V03 May 2021.

Weather Alerts (Surface Water Flood Risk)

Eric Wright Group Ltd Project Management Project Manager and Site Manager should sign up to the Met Office weather warning system <https://www.metoffice.gov.uk/public/weather/warnings>

Alert Level	Definition	Action	Responsibility
Yellow: Be Aware	Yellow warnings can be issued for a range of weather situations. Many are issued when it is likely that the weather will cause some low level impacts, including some disruption to travel in a few places. Other yellow warnings are issued when the weather could bring much more severe impacts to many people but the certainty of those impacts occurring is much lower. It is important to read the content of yellow warnings to determine which weather situation is being covered by the yellow warning.	Walk the site ensuring controls in place	Project Manager, Logistics/Site Manager, groundworker
Amber: Be Prepared	There is an increased likelihood of impacts from severe weather, which could potentially disrupt your works plans. This means there is the possibility of travel delays, road and rail closures, power cuts and the potential risk to life and property.	Clear slip trenches, ensure all hazardous waste stores in good order, ensure bunds are in place and clear in preparation for the weather. Ensure project specific drainage controls are in place.	Project Manager, Logistics/Site Manager, groundworker
Red: Take Action	Dangerous weather is expected and, if you haven't already done so, you should take action now to keep yourself and your works force safe from the impact of the severe weather. It is very likely that there will be a risk to life, with substantial disruption to travel, energy supplies and possibly widespread. You should avoid travelling, where possible, and follow the advice of the emergency services and local authorities.	Clear slip trenches, ensure all hazardous waste stores in good order, ensure bunds are in place and clear in preparation for the weather. Ensure project specific drainage controls are in place.	Project Manager, Logistics/Site Manager, groundworker



Environmental Management Toolkit

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This toolkit has been created as a 'one stop shop' for environmental issues throughout all phases of a development. It includes topic specific legislative requirements, guidance documents, procedures, work instructions, checklists and best practice.

The toolkit should be used in partnership with the Quality & Environmental Department.

Toolkit Extract;

Introduction

Sustainability Tools

1. Site Establishment

2. Existing Environmental Features

3. Site Management

4. Waste

5. Procurement

6. Reporting

3. Site Management > Water Management

Useful documents / guidance

Water is a valuable commodity, especially in times of drought (an evermore common occurrence). As such, the cost of water is increasing, an already significant expense to the Group.

Reducing the amount of water we use is important both as a cost saving opportunity and to reduce carbon emissions. A recent study indicated that the industry could reduce water usage by 20% through the following:

- Installation of flow restrictors
- Installation of dual flush toilets
- Rainwater harvesting
- Changing our behaviours
- Procurement of more efficient systems
- Improved leak detection
- Fixing leaks sooner
- Carrying out water audits of owned assets
- Creating actions plans to reduce water usage
- Using treated / recycled water where viable

Report your water usage at the end of each month through either a KPI return or CSR return.



Environmental Management Toolkit

Home

Glossary

Useful Links

Contact us

A copy of the Environmental Management Toolkit is appended



Stop - Assess - Notify

```

graph TD
    A[Stop - Assess - Notify] --> B[Protected Species]
    A --> C[Invasive Weeds]
    A --> D[Statutory Nuisance]
    A --> E[Contamination]
    A --> F[Archaeological Find]
    B --> G[Stop work immediately]
    C --> G
    D --> G
    E --> G
    F --> G
    G --> H[Assess the situation]
    H --> I[Quarantine the affected area]
    I --> J[Notify  
Group O & E Manager - 07876 445 927  
Environment Agency - 0800 80 70 60]
  
```

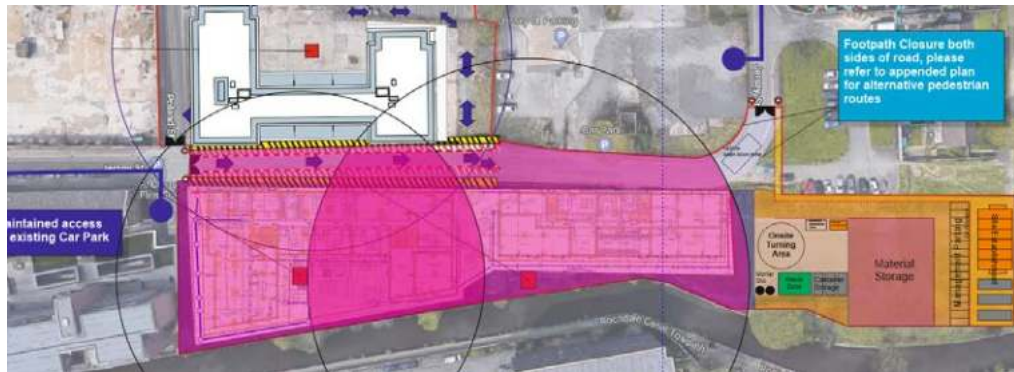
The diagram illustrates the 'Stop - Assess - Notify' procedure for environmental emergencies. It begins with a central box labeled 'Stop - Assess - Notify'. From this box, five arrows point down to a row of five boxes: 'Protected Species', 'Invasive Weeds', 'Statutory Nuisance', 'Contamination', and 'Archaeological Find'. Arrows from each of these five boxes converge into a single arrow pointing down to a box labeled 'Stop work immediately'. From 'Stop work immediately', an arrow points down to 'Assess the situation', which then points down to 'Quarantine the affected area'. Finally, an arrow points down to a box labeled 'Notify', which contains the contact information: 'Group O & E Manager - 07876 445 927' and 'Environment Agency - 0800 80 70 60'.



Waterway Corridor Protection during the Works

We will employ the following methods to protect the waterway corridor during the enabling and construction works;

1. Protective Fencing and Netting as detailed below
2. Tower Crane Strategy – we are proposing the use of luffing tower cranes, these will have the site constraints programmed into the cranes so that no materials will be able to be lifted outside of the construction site boundary, details of this can be provided.

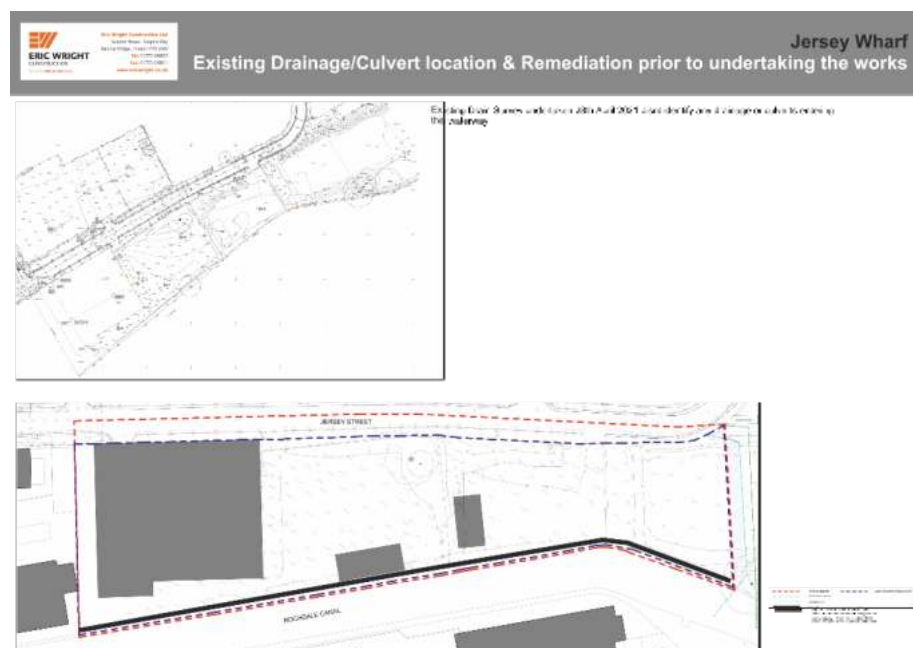


3. Façade Access – This will be provided using mast climbers, the mast climbers directly facing the canal will have mesh protection to prevent materials from falling onto the waterway;



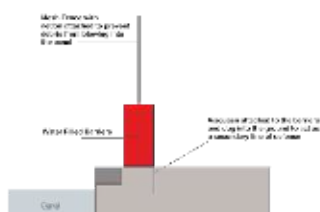
Existing Drainage/Culverts location and remediation prior to undertaking the works

There was a drain survey undertaken on the 28th April 2021, this didn't identify any drainage/culverts entering the Canal, owing to the nature of the site and the previous uses of the site we would undertake a full site turnover of the site and a slip trench to the perimeter of the site in an agreed location with Canals and Rivers Trust to ensure that no Drainage/Culverts exit the site, if any are identified this would be capped at the boundary of the site.



Canal Protective Fencing/Netting

We are proposing to install water filled barriers with mesh fencing above, this will have netlon type mesh installed above;





We are also proposing to attach visqueen to the rear of the barriers and dug into the ground to act as a secondary line of defence.

Communication

Group communications to EWC Staff

Alerts are issued via a SHEQ **Bulletin** to communicate urgent environmental information. These are issued to all staff via email, and hard copies displayed in all site cabins.

The Environmental Manager will contact any external body such as (Natural England, Environment Agency, Local Authority) when an imperative issue arises, thus keeping continual communication channels open.

Communication with Operatives

It will be mandatory, for all sub-contractors and operatives working on the site to undergo a formal **induction** prior to entering the site where all relevant environmental information for the site will be briefed. **Toolbox talks** will also be delivered and records maintained.

Communication with the Local Community

Local residents and businesses that could be disturbed by the works will receive a hand delivered **newsletter** detailing the job, including details of proposed start and completion dates and a summary of the work schedule. Letters are delivered at least 14 days prior to the start of the works and at regular intervals throughout the works. Example below:

Brindle Road, Bamber Bridge ERIC WRIGHT CONSTRUCTION

Site Newsletter No. 1 - June 2014

Introduction

This is the second Brindle Road Housing newsletter.

The works comprise of the construction of 34 dwellings, 10 apartments and 24 houses.

The properties are all being built to a high degree of quality that we at Eric Wright pride ourselves on, using the latest materials within a traditional, attractive design.

The Client is Progress Housing

Key Dates

Start on Site: 02/06/2014
Demolition: 13/06/2014
New Building Works Begin: 09/09/2014
Building Works Complete: First Phase 15/03/2015, Second Phase 04/04/2015
External Works Complete: 04/04/2015

Architects Impression

PROGRESS HOUSING LTD

Upcoming Works

We are currently up to roof level for plots 25-34, with the remainder of the site at first floor level to each plot.

Main drainage works to Brindle Road, adjacent to the main site entrance will commence on 15th December with a duration of 5 working days. Please be aware there may be some traffic disruption, but we will minimise this where possible.

Working in Bamber Bridge, Preston

Eric Wright Construction have committed to using local labour and materials where possible while undertaking these works. We will be working with your local job centre to advertise any vacancies.

Please note that we have a surplus of wood, if anyone would like this for their log burner, please get in touch.

Site Contact Details

Any feedback, suggestions or requests can be directed to our site manager Joel Castles as below:

Telephone: 07825632902
Email: joelc@ericwright.co.uk

Please follow us on: f t in

For more information on Eric Wright Construction please visit www.ericwright.co.uk

A **complaints log** exists on each site that records any feedback from local residents. EWC staff are encouraged to respond proactively to any complaints in a timely and fair manner. All environmental complaints are shared to the Environmental Coordinator to assist with an appropriate response.

During and prior to construction, contact with the public may be necessary. This will be done through site notices, leaflets/letters and making contact in person. This will be done with sufficient notice. Contact details for Manchester City Council's Environmental Health Service will be included on any public consultation material (website):



https://www.manchester.gov.uk/info/100006/environmental_problems/2956/tackle_a_noise_problem/9

Complaints will be taken seriously and resolved by the Technical and Construction Team for matters relating to the site development. The contact details of these are as above.

A **noticeboard** exists affixed to the hoardings on all our sites. This contains:

- Contact details of the Site Manager
- Most recent newsletter
- Notification of any work opportunities
- Most recent environmental dashboard that contains information regarding waste and carbon data

Eliza Yard & Jersey Wharf

Draft Site Logistics Plan : Site Access & Egress



Sheet 1

Project Timeline

2023									2024												2025												2026					
April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
Jersey Street Road Works																																						
Drainage	Enabling Works			Establish Main Site Set Up		Eliza Yard Enabling Works			Eliza Yard Main Contract																													
						Jersey Wharf Enabling Works			Jersey Wharf Main Contract																													

Eliza Yard & Jersey Wharf

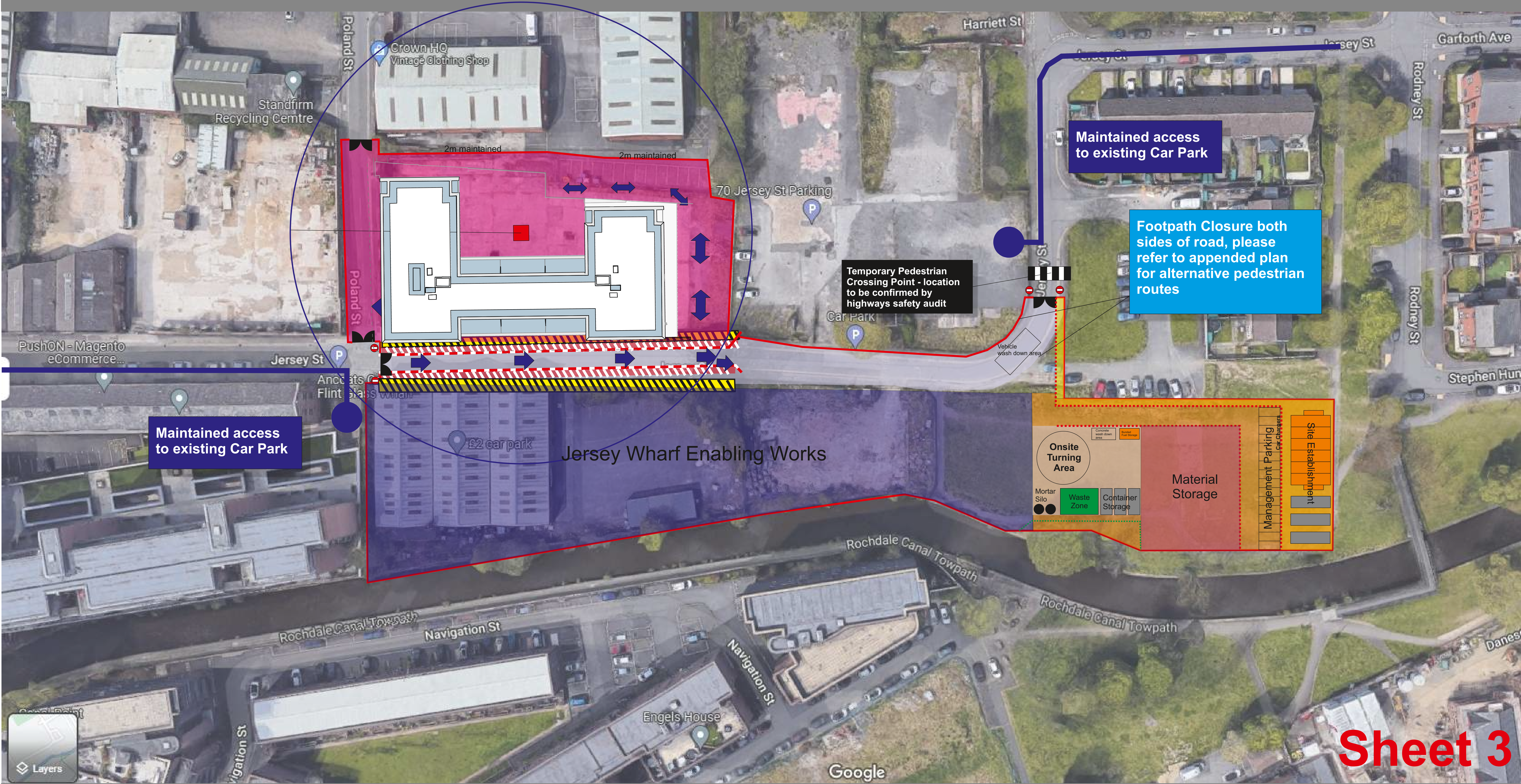


Project Timeline

[illegible]

Eliza Yard & Jersey Wharf

Draft Site Logistics Plan : Site Access & Egress



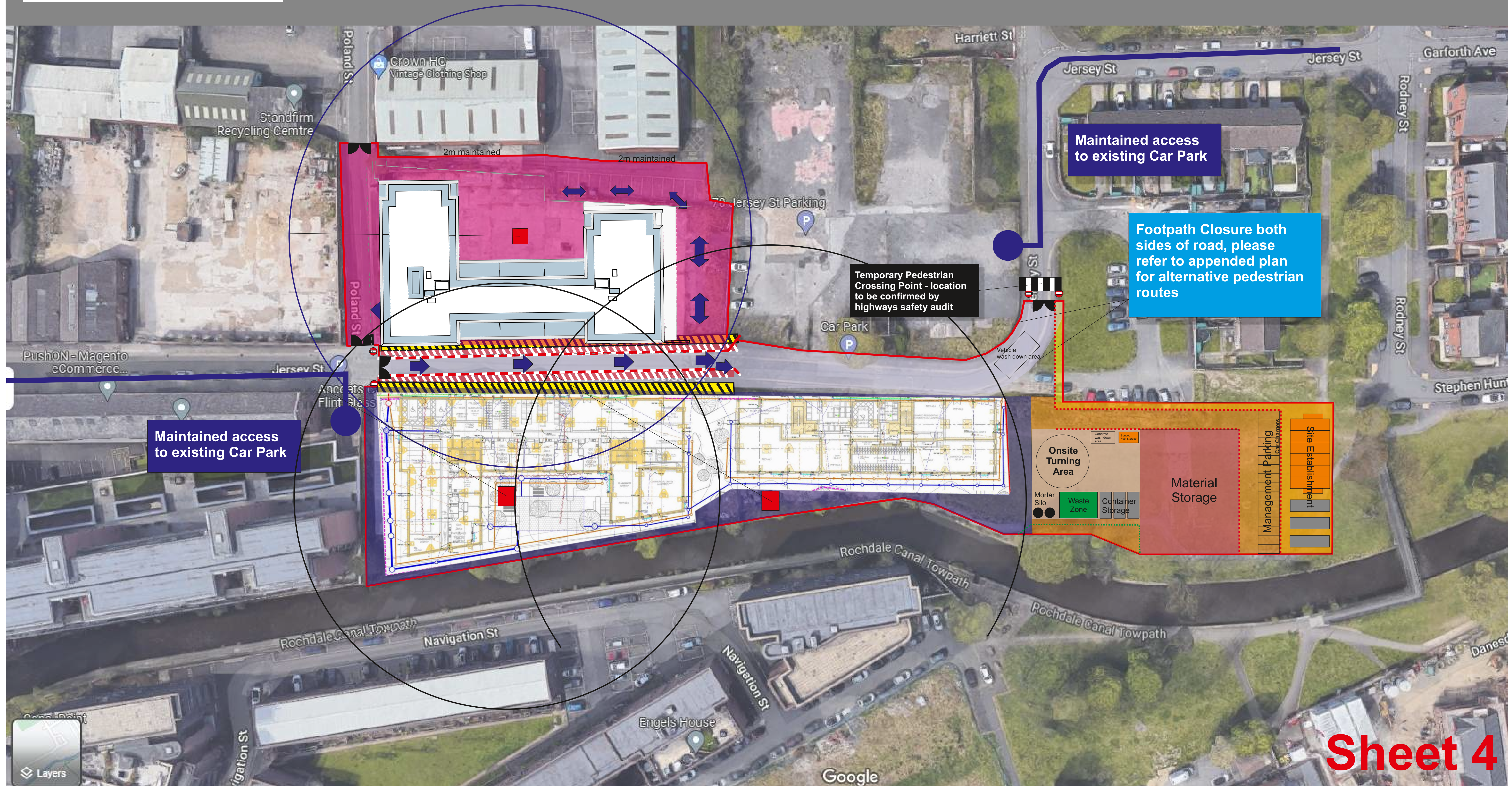
Sheet 3

Project Timeline

2023									2024												2025												2026					
April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
Jersey Street Road Works																																						
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						Jersey Wharf Enabling Works						Jersey Wharf Main Contract																										

Eliza Yard & Jersey Wharf

Draft Site Logistics Plan : Site Access & Egress

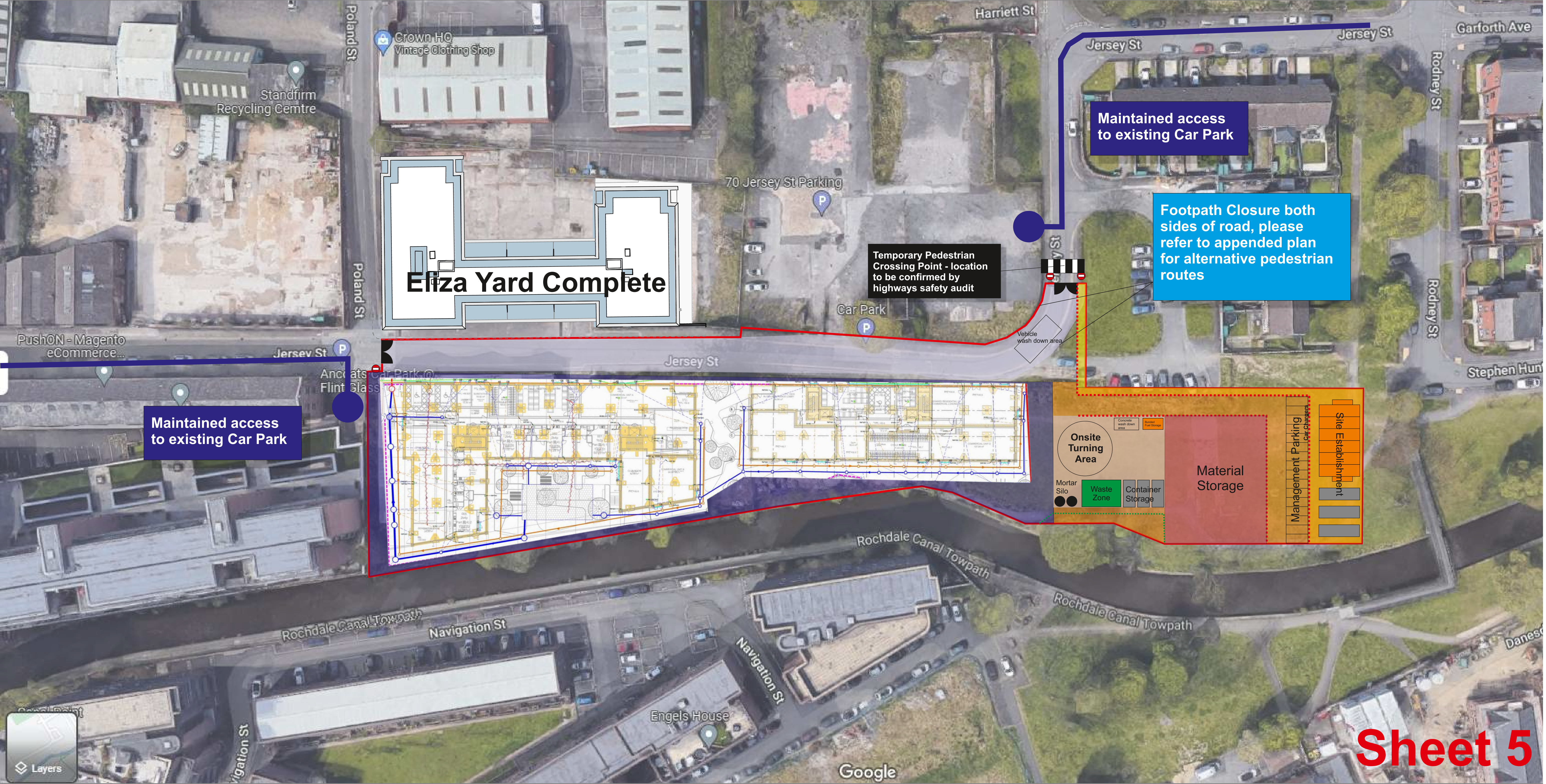


Project Timeline

2023									2024												2025												2026																	
April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June													
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						Jersey Wharf Enabling Works						Jersey Wharf Main Contract																																						

Eliza Yard & Jersey Wharf

Draft Site Logistics Plan : Site Access & Egress



Sheet 5

Project Timeline

2023									2024										2025												2026						
April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
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ERIC WRIGHT
CONSTRUCTION

PART OF THE ERIC WRIGHT GROUP

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Eliza Yard

Draft Site Logistics Plan : Footway Closures



Jersey Wharf Waterway Corridor Protection During The Works



Typical mast climber protection netting to protect against material falling onto waterway



Typical barrier detail

Jersey Wharf Protective Fencing/Netting Strategy



Mesh Fence with
netlon attached to prevent
debris from blowing into
the canal

Water Filled Barriers

Visqueen attached to the barriers
and dug into the ground to act as
a secondary line of defence

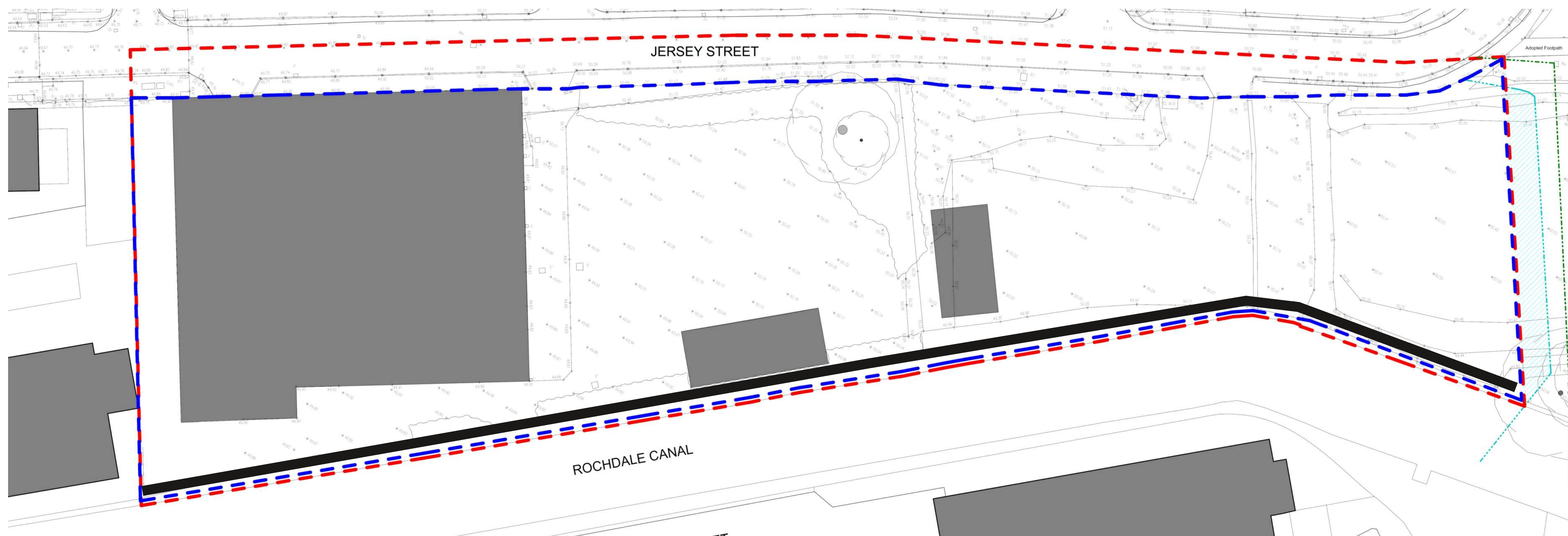
Canal



Existing Drainage/Culvert location & Remediation prior to undertaking the works



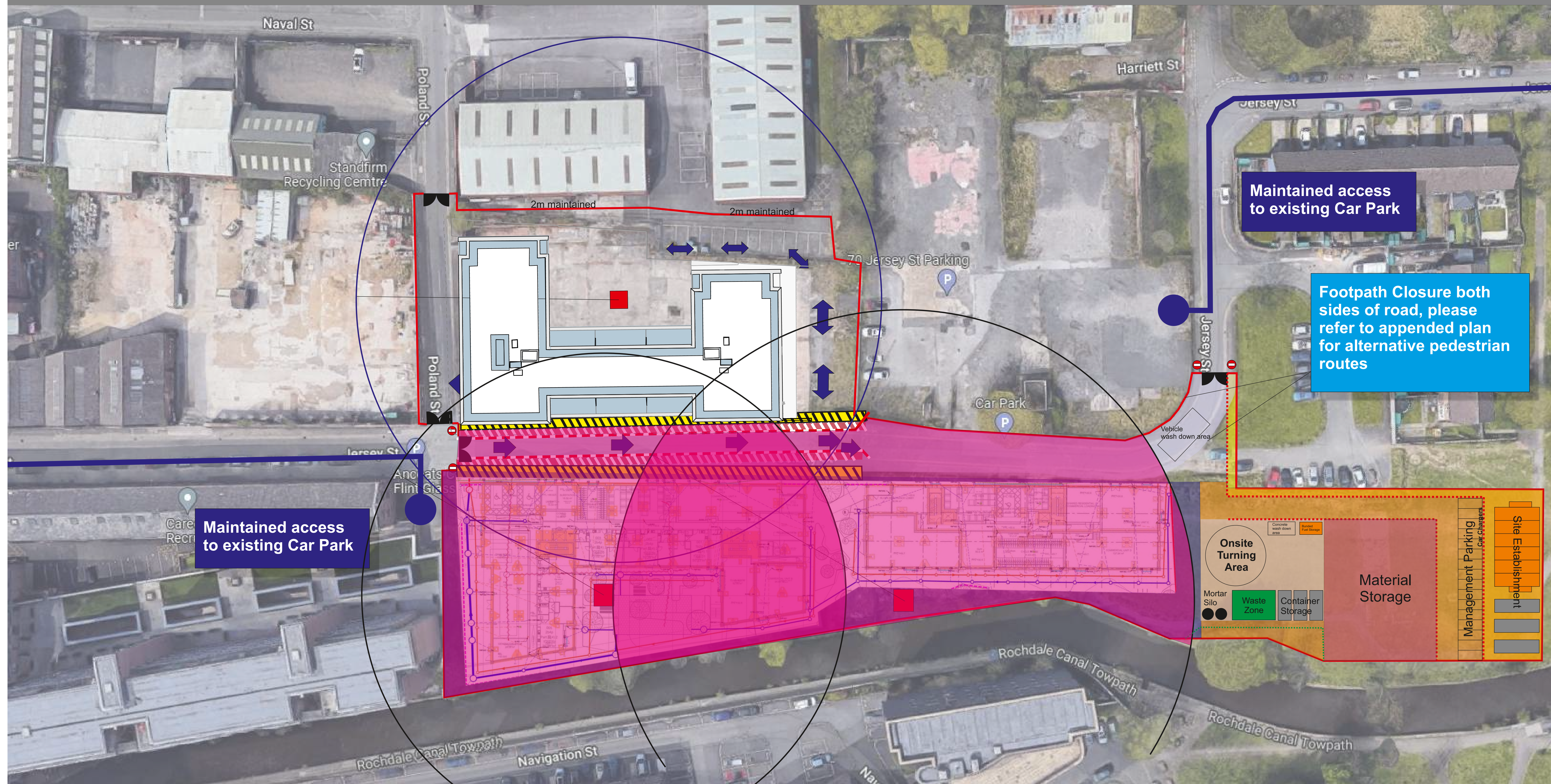
Existing Drain Survey undertaken 28th April 2021 disnt identify any drainage or culverts entering the waterway



--- SITE BOUNDARY
 --- ELECTRIC CABLE
 --- SEWER LINE
 --- LAND OWNERSHIP BOUNDARY
 Slip Trench to a depth of circa 2.5m to ensure that no culverts/drainage enter the waterway - if any are located these will be capped at the boundary of the site

Jersey Wharf

Draft Site Tower Crane Operation Area



EWG-E-MP-02 - Environmental Management Toolkit



Contact us

Issue 1 rev c / Sept 2021



**ERIC WRIGHT
GROUP**

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Sustainability Tools



Site Establishment



Existing Environmental Features



Site Management



Waste



Procurement



Reporting

1. Site Establishment

An efficient and effective site establishment provides the foundation for a successful project. It allows projects to hit the ground running, reduce the potential of environmental issues from early management (positioning cabins and fuel bowzers away from sensitive receptors), generates a good appearance of site, our company and our industry, as well as having the potential to reduce running costs for your project.

Hazard ID & Risk Assessment

Hoardings

Site Welfare

Grid Connection

Emergency Preparedness

1. Site Establishment > Hazard ID & Risk Assessment

[Useful documents / guidance](#)

The first stage of adequately assessing site risks is to complete a Hazard Identification & Risk Assessment. A Hazard Identification & Risk Assessment consists of a desk top and site walkover study. It is designed to recognise aspects of your proposed works which could have an impact on the local / global environment. Once hazards have been identified and risks assessed, control measures should be implemented to minimise or mitigate the potential environmental impact.

For example; a project may be required to demolish an existing building prior to the erection of the new development. The site location is in a residential area and therefore statutory nuisance (noise / vibration / dust) will be an issue during all phases of the development. The impact of this to the local community / residents will be high, and complaints likely.

By applying control measures, the impact can be significantly reduced and community relations improved.

Potential control measures include:

- Frequent letter drops to local residents informing them of the work
- Effective positioning of plant and equipment
- Briefing staff on their responsibilities and ensuring idling engines are prohibited
- Use of noise screening where viable and on-site noise monitoring
- Constant communication with the local council Environmental Health Officer

A Hazard Identification & Risk Assessment must be completed for all projects (including managed assets) prior to start on site. It should be used in collaboration with your risk and opportunities register.

Hazard
Identification

Risk Assessment

Control
Measures

Monitor &
Review



1. Site Establishment > Hoardings



The main environmental issues relating to hoarding concern:

- The use of materials in constructing the hoarding
- The generation of waste from the disposal of panels
- The short life span of the products

Consider using hoardings made from materials that are recycled, durable (can withstand the demands of the construction industry, urban environments and UK weather) and could be re-used across the business at the end of the project.

For example, recycled plastic, is a viable option.

1. Site Establishment > Site Welfare

Site cabins are an important element during site setup.

Procuring energy efficient site cabins, although slightly more expensive, will reduce your running costs and energy production.

Options you should consider include:

- Power source (generator size / type, main electricity grid connection)
- LED lighting system
- Heating system
- Insulation specification
- Glazing specification
- Renewable technologies such as solar panels
- Size of cabins required for site works



The responsible use of site cabins is critical to ensure running costs are minimised, energy is not wasted and the risk of pollution is reduced.

Sites should:

- Place cabins away from sensitive receptors such as watercourses
- Keep doors and windows closed whilst heating units are on
- Turn off all lights and heaters if they are not on Passive Infra Red (PIR) sensors or a time clock system
- Unplug chargers and other electrical equipment when not in use
- Shut off generators when they are not required (overnight / weekends)



1. Site Establishment > Site Welfare > Internal & External

[Useful documents / guidance](#)

Display the following environmental documentation:

- Environmental Policy
- Emergency Response Register
- Spill Response Action Plan
- Emergency Action Plan
- Site Waste Management Plan
- Refuelling procedure
- SHEQ bulletins



Ensure site set up is designed to minimise harm to the environment e.g. cabins located to minimise noise disturbance to neighbours. Use features to ensure ongoing high standards of site such as:

- Boot wash facilities
- Litter bins
- Hardstanding areas to reduce dust production from plant
- Road sweepers when required
- Spare paint on site for any graffiti



1. Site Establishment > Grid Connection

Seek electrical connection to the grid at the earliest opportunity rather than use generators. Achieving this:

- Reduces costs dramatically – Up to 60%
- Produces fewer greenhouse gas emissions
- Reduces noise and odour pollution
- Increases on site space that would otherwise be occupied by generators

Other considerations:

- Connection to the grid takes time. Start the process as early as possible to take full advantage of the savings
- On shorter projects, the initial cost of connection, and the time delay may make grid connection unfeasible
- When using generators, ensure they are used as efficiently as possible. Use a suitably sized generator and switch it off when not required
- Clarify that a permanent supply can not be brought on at an earlier stage in the contract, before financing temporary supplies



1. Site Establishment > Emergency Preparedness

[Useful documents / guidance](#)

The construction industry contributes the greatest number of significant environmental incidents. The effects of any leak, spillage or statutory nuisance incidents can be reduced by having effective emergency response arrangements. To do this:

- Identify the emergency arrangements specific to your site by completing a Hazard Identification & Risk Assessment
- Complete and display necessary documents such as the emergency response register, spill response action plan, emergency response plan, etc.
- Ensure spill kits are appropriate to the potential spill and are located at key locations. Identify this on the site logistics plan
- Ensure staff are trained to use the spill kits
- Ensure the drainage plan is up to date and covered in the induction
- Ensure drip trays / interceptor trays / plant nappies are in use along with any other protection measures required
- Monitor through regular checks and record in site diaries
- Test your site emergency response and act accordingly
- Record any environmental incidents or emergencies using the appropriate form



2. Existing Environmental Features

There are many existing environmental features that could affect any site. To reduce risk, it is vital we fully understand the issues in order to adequately minimise / mitigate against the risks. Failure to identify and reduce these risks could result in the business receiving penalties.

Protected Sites

Tree Protection

Invasive Weeds

Protected Species

Archaeology

Surface Water

Drainage

Groundwater

Contaminated Land

Petrol Interceptors



2. Existing Environmental Features > Protected Sites

[Useful documents / guidance](#)

We must consider how our works could impact on any protected site. These areas are classed as such due to their environmental, historical or cultural value to the nation. There are a variety of sites that are protected for different reasons including listed buildings and open spaces.

The following areas are all protected by law:

- National parks
- Areas of outstanding natural beauty
- Sites of Special Scientific Interest (SSSIs)
- Special Areas of Conservation (SACs)
- Special Protection Areas (SPAs)
- RAMSAR Sites
- Sites of Community Importance (SCIs)
- Marine Conservation Zones

Planning authorities can consult Natural England if an activity has the potential to affect a protected site. They can enforce changes to our plans, ensuring we do work in a certain way or even refuse planning permission.

If our works affect a European protected site, it may be compulsory to provide additional information / assessments in order to complete the works.



2. Existing Environmental Features > Tree Protection

[Useful documents / guidance](#)

Sites may encounter trees that are subject to Tree Protection Orders (TPOs), an order made by a local planning authority to protect specific trees, groups of trees or woodlands. An Order prohibits the cutting down, topping, lopping, uprooting, damage or destruction of trees without the local planning authorities written consent.

In addition to TPOs, sites may also encounter trees which are due to remain as part of a planning condition / client requirement. In any case, the following must be strictly followed.

- Ensure nesting birds / habitats are not disturbed at all
- Keep vehicles and plant well away from the defined root protection area
- Install fencing to create a physical boundary around the trees
- Do not cut or damage any roots greater than 25mm in diameter within the protected area
- Wrap damp sacking around any exposed roots until ready for backfilling
- Backfill with care, ensuring roots are not damaged, and compact backfill lightly
- Do not store spoil or building materials within the protected area
- Keep toxic materials such as diesel and cement away



2. Existing Environmental Features > Invasive Weeds

[Useful documents / guidance](#)

Invasive weeds are a species of plant that are not native to a specific location. They have a tendency to spread, causing damage to the environment, human economy and the structural integrity of buildings / bridges.

Each weed comes with its own specific problems and specialist advice must be sought when an invasive weed has been identified. If an unexpected discovery, it should be added to the sites hazard identification & risk assessment document and the risk and opportunities register. **An incident report form must be completed and issued to the Quality & Environmental Department.**

The following actions are illegal when it comes to all invasive weeds:

- ✗ Plant or encourage the growth of invasive weeds. This includes moving the surrounding soil that may contain seeds or plant material, unless part of a documented remediation strategy
- ✗ Double handle material suspected of containing invasive weeds
- ✗ Stockpile material suspected of containing invasive weeds within 10m of a watercourse
- ✗ Track plant or equipment through invasive weeds

Should invasive weeds be discovered on your site, you must:

- ✓ Immediately stop all work within 7m of the suspected areas and contact the Q & E department
- ✓ Seek immediate medical advice if you come into contact with it
- ✓ Contact your client or the clients agent immediately



Giant Hogweed



Japanese Knotweed



Himalayan Balsam

2. Existing Environmental Features > Protected Species

[Useful documents / guidance](#)

Protected species are certain species of plants and animals that are protected by law throughout the European Union. Each protected species comes with their own difficulties and specialist advice must be sought. If an unexpected discovery, it should be added to the sites hazard identification & risk assessment document and the risk and opportunities register. **An incident report form must be completed and issued to the Quality & Environmental Department.**

The following actions are illegal when it comes to all protected species:

- ✗ Kill, injure, touch or capture any protected species
- ✗ Take, damage, destroy or disturb any protected species habitat
- ✗ Move any plant and equipment where protected species may be habituating

Should protected species / habitats be discovered on your site, you must:

- ✓ Immediately stop all work within 7m of the suspected areas and contact the Q & E department

Failure to adhere to the above could result in a £5000 fine per animal and up to 6 months in prison for those found to be guilty.



Bats



Badgers



Great Crested Newts



Adders



2. Existing Environmental Features > Archaeology

[Useful documents / guidance](#)

Archaeological sites / artefacts can present hazards that are often underestimated as a business / project risk, and overlooked in the design stage of a project. Artefacts are irreplaceable, non renewable and require protection. Their presence provide many benefits to the UK:

- They form part of our national heritage and are protected under heritage law
- They make a significant contribution to education, social cohesion and the economy
- They provide wide public benefits
- They underpin UK tourism / heritage industries and create jobs
- They play a role in the reservation of an area by invoking a sense of cultural identity

Should you unexpectedly discover an object that may be significant, you must ensure:

- Work is stopped immediately and the find is not disturbed
- The area is cordoned off and no access is given to the area
- Contact your client or the clients agent immediately
- The findings are reported to the Q & E department and EA if applicable

The benefits to EWG from protecting and retaining such sites / artefacts are:

- **Sustainability** – It demonstrates our commitment to sustainability.
- **Reputation** – It could lead to positive publicity / involvement with the community if well protected and managed.

Failure to identify / manage could lead to planning constraints, programme alteration, change in working methods, additional testing / requirements and increased costs.



2. Existing Environmental Features > Surface Water

[Useful documents / guidance](#)

Construction / maintenance activities in or near water are among the most high risk activities we do. They have a risk of causing serious impacts on the bed and bank of a watercourse and on the quality and quantity of water. Dust, debris, silt and wastewater are the most common pollutants produced when working near surface water.

External desktop studies provide all the necessary information on the location of vulnerable geological features such as watercourses. This information should be used to ensure:

- Consents are in place with the required authorities / governing bodies prior to our commencement date on site
- Fuel storage and refuelling of machinery are sited 30 feet from any body of water
- Risk Assessments & Method Statements have been developed to incorporate the risks and mitigation measures into sub-contractor works. These must be adhered to at all times and any major changes to the method statement must be discussed with the EA for high risk works
- A containment system design is in place to reduce the risk of pollution from our work (the type of containment will depend on the sensitivity of the site)



2. Existing Environmental Features > Drainage

[Useful documents / guidance](#)

There are two main types of drainage system we need to be aware of:

Foul drainage – carries used water from toilets, sinks, basins, baths, showers, dishwashers and washing machines to a sewage works for treatment, before being discharged to a watercourse.

Surface water drainage – carries uncontaminated rainwater from hard surfaces directly to a river, stream or soakaway.

All sites must:

- Produce a drainage plan which is readily available and clearly distinguishes between surface and foul water drains
- Ensure nothing except clean rainwater enters the surface water drainage system
- Store materials and plant away from drains (generators, pumps, paint, stockpiles, fuel)
- If discharging is required to a foul sewer, ensure there is an agreement in place with the sewerage undertaker
- Protect drains from pollution using silt traps or similar, particularly if site run off could enter the drainage systems
- Have an emergency preparedness plan and an environmental response register

Note: Detergents described as bio-degradable are not suitable for discharge to surface water drainage systems.



2. Existing Environmental Features > Groundwater

[Useful documents / guidance](#)

Groundwater is all water in the saturation zone and in direct contact with the ground or subsoil. Although a hidden asset, groundwater is a vital resource with many different roles including supporting river flows and providing approximately 30% of the UK with fresh drinking water.

Groundwater is coming under increasing pollution pressure from gasoline, oils, hazardous waste, chemicals, storage tanks and septic tanks, potentially leading to devastating environmental changes such as:

- Loss of nutrients that are essential for self sustenance of an ecosystem
- Alteration of aquatic ecosystems when pollutants mix with water courses. Aquatic animals die as a result
- Alteration in plant and animal characteristics
- Groundwater becomes unsuitable for human and animal consumption spreading disease such as hepatitis



As well as the significant environmental impacts, presence of groundwater can impact on your projects, for example, during piling operations, presence of groundwater may result in the requirement for dewatering systems to be installed. Do we have the correct permits in place to carry out these activities? Has the water quality been tested? Is it contaminated? Can we discharge to foul sewers or do we need to tanker the liquid off site?

Sites should initially assess the existing groundwater levels and any fluctuation to the levels brought about by seasonal change, new construction, excavations and other related activities.

2. Existing Environmental Features > Contaminated Land

[Useful documents / guidance](#)

Contaminated land is usually found where there is a redevelopment of land that was used previously for commercial or industrial activity. The level of contamination will depend on the quantity or type of solid / liquid waste that has permeated the ground. This will be detailed through either a planning condition or ground investigation report.

Managing contaminated land involves three stages:

1. Identification of risks (humans, environment, watercourses, ecosystems and property)
2. A review of remediation options. Determine the most appropriate remediation strategy following the CL:AIRE protocol to reduce those risks to an acceptable level so the land is suitable for its intended use
3. Implementation of the preferred remediation strategy



The following must all be adhered to when dealing with contaminated land:

- The land must be initially tested to determine the contaminants and therefore the remediation strategy
- The remediation strategy must be signed off by a contaminated land specialist. This information must be included within the sub-contractors RAMS. A watching brief may be required
- Stockpiling of materials should be avoided. Where required, contaminated material must be placed on impervious ground and covered
- Where excavated material is to be removed as waste, site must follow hazardous waste regulations and the EWG duty of care procedure
- A wheel wash facility for vehicles passing through the contamination must be installed
- Permits and registration exemptions may be required for plant and movement of the material
- If site contamination is a planning condition, there will need to be a final sign off



2. Existing Environmental Features > Petrol Interceptors

[Useful documents / guidance](#)

Surface water may be contaminated at a number of different sites including; car parks, vehicle maintenance areas, industrial sites, roads, any site where oil is stored or any site with a risk of oil contamination. Petrol separators can be fitted to surface water drainage systems to protect the environment from pollution.

Sites must ensure the chosen petrol interceptor is appropriate to the site taking into account discharge points, environmental sensitivity and activities on site.

To prevent pollution and minimise costs, you must manage the separators effectively. To do this:

- Ensure each site has an incident response plan
- Ensure each site has a number of spill kits
- Ensure each part of the interceptor is accessible at all times
- Every 6 months, physically inspect the integrity of the separator, assess the depth of accumulated oil / silt, service all electric equipment such as alarms and the management system, and check the conditions of any coalescing device
- Keep a detailed log of when each separator is inspected, maintained, emptied and serviced
- Record any event relating to the separator such as cleaning, repairs, accidents and incidents
- Empty the separator as soon as a significant quantity of oil / silt has accumulated. Employ a licenced waste removal contractor to do this and obtain any duty of care records. Refill the separator with clean water before it is put back in to service
- Every 5 years, empty the separator and carry out a general inspection to test the integrity and performance of the system



3. Site Management

Induction

Pollution Prevention

Statutory Nuisance

**Managing Sub-
contractors**

Communication

Plant Use

Energy Management

Water Management

Pests

Flooding

**Environmental
Assessments**

**Environmental
Inspections & Audits**



3. Site Management > Induction

[Useful documents / guidance](#)

All sub-contractors and operatives working on site must undergo formal induction prior to entering site. During the induction, all relevant environmental information must be briefed to the site operatives. To do this:

- Use the site specific Hazard Identification & Risk Assessment to identify specific site environmental concerns
- Raise these particular areas of concern throughout the induction. For example; neighbouring properties or presence of protected species
- Supplement with recent and relevant maps / photographs
- Inform operatives of our high standards and how this will be monitored. For example; housekeeping, weekly site inspections, waste management reviews
- State how toolbox talks will be delivered on the project – frequency, expectations, etc.
- Cover the Emergency Action Plan and Spill Response Plan. Inform operatives of reporting lines and location of nearest spill kits



3. Site Management > Pollution Prevention

The construction industry contributes the greatest number of significant pollution incidents. Pollution from site activities can occur from a variety of sources to a number of receptors.

Each pollution incident is an offence and can result in business and individual prosecution as well as environmental damage and reputation loss.

However, most cases are avoidable, given careful planning of operations and responsible management.

Air

Silt

Concrete

Chemicals

Oil

Refuelling

Spills



3. Site Management > Pollution Prevention > Air

[Useful documents / guidance](#)

As a whole, the construction industry is a major source of pollution, responsible for approximately 4% of all particulate emissions.

This is mainly due to the number of activities that contribute to global emissions including; land clearing, operation of plant, demolition, dust, working with toxic materials, construction in general and waste production.

There are some emissions that are necessary in order for us to do our job, but there are also emissions which we can reduce by ensuring:

- Vehicle idling is prohibited and policed
- All vehicles and equipment is maintained so exhaust emissions do not breach statutory limits
- Vehicle exhausts are positioned at sufficient height to ensure the dispersal of emissions
- Efficient generators are procured when required
- Mains power to site cabins is established early in the programme to reduce the requirement for generators
- Strategically plan deliveries



3. Site Management > Pollution Prevention > Silt

[Useful documents / guidance](#)

Silt pollution is a major cause of environmental incidents, responsible for approximately 40% of construction related pollution incidents. Silt entering watercourses destroys aquatic life and can cause flooding by blocking culverts and channels. Silt pollution can be caused by the following:

Disturbance of a river bed or bank – The EA must be contacted to obtain appropriate permits / consent and discuss appropriate pollution control measures when working near a river bed or bank.

On site working – The movement and maintenance of plant on site can generate silt. Site roads and river crossings carry a high risk. Reduce the risk by procuring roadsweepers to clean roads, using existing bridges for river crossings and working away from the bank where possible.

Dewatering – Problems can be minimised / avoided by; preventing water entering excavations, using pump sumps in excavations, using settlement / filtration tanks, discharging onto hard surfaces such as gravel.

Run off from exposed ground and stockpiles – Minimise the amount of exposed ground and soil stockpiles, only remove vegetation from areas where it is necessary, seed or cover stockpiles, use silt fences, collect run off in lagoons and allow it to settle before disposal.

Wheel and plant washing – Site roads and vehicle / wheel washing carry a high risk of causing pollution. Control measures to be considered include; washing vehicles in a designated area and collecting run off in a sump and discharging of contained water into a foul sewer (with consent).

When undertaking activities where silt is an issue, any measures to prevent silt in the first instance are favourable and carry less risk and costs.



3. Site Management > Pollution Prevention > Concrete

[Useful documents / guidance](#)

Fresh concrete and cement are very alkaline and corrosive. If they are released into watercourses or ground water they can cause serious pollution. A serious pollution could result in a potential £1,000,000 fine for the business, as well as the costs of cleaning the incident.

In order to minimise the risk of pollution occurring, any activity involving the mixing and use of concrete must be undertaken with the provision of a concrete wash out.

When setting up a concrete mixing / wash facilities:

- Ensure it is sited 10 metres from any watercourse or surface water drain
- There must be a contained area for washing out and cleaning of concrete batching plant / ready mix lorries
- Collect wash waters and, where necessary, discharge to the foul sewer (you must have permission from the local sewerage undertaker for this), or contain wash water for authorised disposal off site
- Wash waters from concrete and cement works must never be discharged in to the water environment



3. Site Management > Pollution Prevention > Chemicals

[Useful documents / guidance](#)

Chemicals are one of the most common pollutants. The clean up operation can be difficult and expensive. It can also affect more than just your site.

Storage

- Ensure chemical storage is secure
- Store on an impervious base
- Use secondary containment capable of holding 110% of the volume stored
- Store well away from any high risk receptors – water courses etc.
- Keep a spill kit at the storage area
- Ensure all containers are clearly labelled with their contents
- Remove any empty or damaged drums or containers

Biodegradable oils

- Using biodegradable hydraulic oils in plant can reduce the damage caused should a spill occur. This is particularly relevant when working in or near watercourses
- Although biodegradable oils are less toxic than synthetic oils, they should still be handled in the same way to minimise the risk of spill in the first instance



3. Site Management > Pollution Prevention > Oil

[Useful documents / guidance](#)

Oil is one of the most common pollutants. The clean up operation can be difficult and expensive. It can also affect more than just your site.

Ensure oil storage is:

- Secure
- On an impervious base
- Has a secondary containment system such as a bund
- Capable of containing at least 110% of the volume stored
- Above flood water level
- Away from high risk locations
- At least 10 metres from a watercourse

In addition, you must ensure:

- Ancillary equipment is being used when refuelling
- Damaged, leaking or empty drums are removed from site immediately via a registered waste disposal contractor
- Spills kits and other products such as sand are stored close to oil storage
- Staff are trained on how to use spill kits effectively
- Necessary documents such as refuelling procedures, emergency response registers and spill response plans are displayed
- Incident response training has been provided to staff and operatives
- Relevant procedures and a risk assessment is included within RAMS.



3. Site Management > Pollution Prevention > Refuelling

[Useful documents / guidance](#)

The risk of spilling fuel is at its greatest during refuelling. To minimise the risk:

- Refuel well away from any high risk receptors – water courses etc.
- Keep sufficient spill kits along with sand, earth or commercial products for containment at the storage area
- Refuel mobile plant in a designated area, on an impermeable base away from drains or watercourses
- Use a bunded bowser and position drip trays / plant nappies appropriately
- Supervise all refuelling and bulk deliveries
- Check the available capacity in the tank before refuelling
- Don't jam open a delivery valve
- Check hoses and valves regularly for signs of wear
- Turn off valves after refuelling and lock them when not in use
- Provide incident response training to your staff and contractors
- Train staff on the refuelling procedure



Danger
Refuelling Area



3. Site Management > Pollution Prevention > Spills

[Useful documents / guidance](#)

In the event of a spillage, site management are responsible for ensuring that the spill response procedure and the emergency response plan are implemented. This includes:

- Taking immediate actions to stop the spillage reaching a drain or watercourse
- If possible, soaking up the spillage using the sites spill kits / imbibers beads
- Reporting the incident to the Environmental Manager of EWG

All spillages must be reported to the Environmental Manager where the details of the spill will be assessed to determine whether the Environment Agency should be notified. Investigations will be carried out by site management and the EWG Environmental Manager where necessary to determine the root cause.

Reporting of spills is an integral part of our environmental management system. We treat all spills as a learning process.



3. Site Management > Spills > Remedies

[Useful documents / guidance](#)

Ensure the correct spill kits / imbibers beads are readily available and accessible to staff where machines are operating or refuelling. Emergency spill kits consist of 20 pads, 2 booms, 2 pillows, plastic bags for the disposal of used kits, disposable gloves, goggles and the kit instructions.

Spill Kits

- Ensure there is a supply near the refuelling area
- A small kit must be held in mobile plant
- Ensure it is the correct spill kit for the fuel being used
- Ensure people are trained to use them
- Ensure emergency preparedness plans are displayed
- Ensure spill response plans are displayed

Imbiber Beads

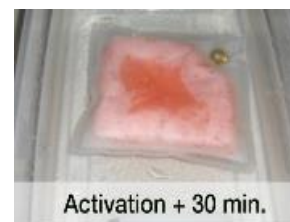
- Removes hydrocarbons, leaving only water behind (useful product for interceptor trays)



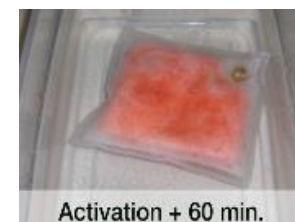
Packet in water



Add: 590 ml Diesel



Activation + 30 min.



Activation + 60 min.

3. Site Management > Statutory Nuisance

Statutory nuisance is covered under the Environmental Protection Act 1990, and is defined as anything that unreasonably affects a persons health or causes disturbance. Abatement notices can be served by local councils, with penalties including fines, confiscation of equipment, site injunctions and even prison sentences for responsible parties.

Noise

Vibration

Dust

Odour

Light



3. Site Management > Statutory Nuisance > Noise

[Useful documents / guidance](#)

Noise is considered a nuisance if it causes substantial interference or the ability to cause harm. Should noise levels reach unacceptable levels, local councils and Environmental Health Officers can serve sites with abatement notices, restricting or stopping site works. Those failing to comply with the notice can be prosecuted further.

This affects us greatly in urbanised areas, particularly during certain site operations. Sites must identify high risk operations and locations through risk assessment and mitigate noise at either source or receptor through the following methods:

- Keep locals and the local Environmental Health Officer informed
- Shield noise activities with acoustic screens
- Ensure equipment brought to site has noise limits
- Use alternative construction methods
- Work within agreed planning constraints and reduce weekend work
- Control delivery times and drop off areas
- Choose a suitable compound location
- Monitor noise using correctly calibrated equipment
- Ensure vehicles are switched off when not in use (no idling)
- Ensure induction content covers the expectations of site personnel
- Open a channel of communication with the public, keeping them informed of our works and what they can expect

All complaints made must be logged following the feedback procedure.



3. Site Management > Statutory Nuisance > Vibration

[Useful documents / guidance](#)

Vibration can cause a wide range of issues from nuisance to structural damage of adjacent buildings. Sites with excessive vibration can be subjected to abatement notices, given by the Environment Agency or local Environmental Health Officer. Those failing to comply with the notice can be prosecuted and receive fines and prison sentences.

This affects us greatly in urbanised areas, particularly during certain site operations. Sites must identify high risk operations and locations through risk assessment and mitigate vibration through the following methods:

- Eliminate the amount of vibration at the design stage by using pre-fabricated components or an alternative process
- Select low vibration tools and equipment
- Ensure tools are being used correctly and are efficient for the task that is being undertaken
- Work within agreed planning constraints and reducing weekend working
- Control delivery times and drop off areas
- Choose a suitable compound location
- Monitor vibration using correctly calibrated equipment to ensure compliance
- Ensure vehicles are switched off when not in use (no idling)
- Ensure induction content covers the expectations of site personnel
- Open a channel of communication with the public, keeping them informed of our works and what they can expect

All complaints made must be logged following the feedback procedure.



3. Site Management > Statutory Nuisance > Dust

[Useful documents / guidance](#)

Dust can be a major issue during construction and demolition work; causing health issues from poor air quality. Activities such as excavation, deliveries and plant movements can all cause excessive dust levels. To determine whether the dust is a nuisance, local councils / authorities consider the following:

- The amount of dust being generated and it's affect on nearby properties
- How often dust is being generated
- Whether the dust is affecting a persons enjoyment of their property
- The protection measures on site to reduce the dust

Where dust is an issue, sites must develop a dust control strategy and monitor dust. The strategy should include mitigation / reduction measures. These measures could include:

- Providing adequate screening and damping down during dust generating activities
- Applying site speed restrictions
- Scheduling deliveries to avoid standing traffic on routes to site
- Providing wheel washing facilities where viable
- Storing materials away from site boundaries and sensitive receptors
- Use of diamond cutting blades and extraction equipment such as vacuums.
- Avoid dry sweeping
- Use of enclosed or sheeted vehicles
- Procure a road sweeper – Collect waste transfer notes and licences following the duty of care procedure

All complaints made must be logged following the feedback procedure.



3. Site Management > Statutory Nuisance > Odour

[Useful documents / guidance](#)

Odour can be classed as a statutory nuisance if it is unreasonable and substantially interferes with the use or enjoyment of an area, or has the potential to impact health. The nuisance can be caused by a variety of processes. To determine whether the smell is a nuisance, local councils / authorities consider the following:

- The origin and characteristics of the smell
- The number of properties and people affected
- The character / heritage of the area
- The affect on the quality of life nearby
- How often the smell is present

Sites must ensure as a minimum:

- Toilet blocks are positioned away from sensitive receptors
- Fem hygiene waste is segregated from all other waste and is removed on a regular basis following the duty of care procedure
- Canteen waste is segregated from construction waste from all other waste and is removed on a regular basis following the duty of care procedure
- Any spills are cleaned and reported immediately

Councils must serve abatement notices to sites where nuisance has happened, is happening or will happen in the future. An abatement notice requires the site to stop or restrict the smell.

All complaints made must be logged following the feedback procedure.



3. Site Management > Statutory Nuisance > Light

[Useful documents / guidance](#)

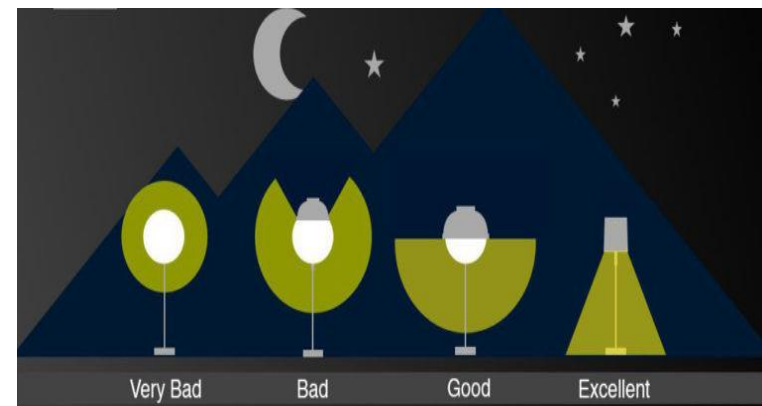
Light pollution is not always considered a nuisance, but can have significant adverse effects such as:

- Impacts on the health and wellbeing of people by disrupting body cycles regulated by darkness and light. Sleep disorders, increased stress and certain types of cancer are believed to be developed from artificial lighting
- Disruption of breeding patterns of nocturnal animals, insects and the migration of birds

Light pollution can be a particular problem for our sites where new or temporary lighting is installed to provide safe working conditions and security. The following measures should be considered / adopted when providing site lighting.

- All lighting should be situated to provide enough lighting as necessary for work and no more
- Lighting should face downwards so it does not affect local premises
- Screening of lighting and effective programming of works
- Type of lights used for security

All complaints made must be logged following the feedback procedure.



3. Site Management > Managing Sub-contractors

[Useful documents / guidance](#)

Effective management of our sub-contractors is imperative to what we do. Organised, tidy sites are safer and easier to manage. They not only reduce the risk of both health & safety and environmental incidents occurring, they can ensure quality is achieved, generate cost savings and improve the image of our site, which will in turn, improve our image as a business. Consider the following:

- Are sub-contractors aware of the sites environmental risks and our expectations?
- Are materials stored and handled efficiently by sub-contractors?
- Are the materials brought to site by sub-contractors the specified materials? Have we checked this upon delivery and obtained a copy of the delivery ticket for our records?
- Are our sub-contractors clearing away all their flammable waste materials (such as packing and timber off cuts) to a designate place.
- Are work areas cleared of waste regularly to reduce trip hazards, dust and improve housekeeping? Are wheelie bins or chutes required to enable waste materials to be brought out of the building?
- Are waste materials stored safely before their removal from site?
- Are operatives respecting the community we are working in?
- How would you rate the sub-contractors performance? If our sub-contractors environmental performance is poor, you can issue clean up notices or non conformances as per company procedures.



3. Site Management > Communication

[Useful documents / guidance](#)

Toolbox talks are a great way for site management to communicate to site operatives.

They can be used to reinforce basics, focus on high risk scenarios or to inform operatives about changes to site working conditions.

They are essential to reduce the risk of an incident occurring that could impact on the environment.

Should an incident occur, evidence of toolbox talk delivery to operatives could be used in a court of law, reducing our liability.

They are also essential pieces of evidence which could be requested by the Environment Agency or provided in sustainability assessments such as BREEAM.

The suite of toolbox talks forms part of EWG's continuing efforts to create an increased awareness of environmental and sustainability issues.

Important environmental alerts are issued via SHEQ bulletins to communicate urgent environmental information.

Contract No	Contract Name
-------------	---------------

TBT Number	Topic	Date
1.	Archaeology	
2.	Energy Fuel Efficiency	
3.	Material Handling and Housekeeping	
4.	Working on Previously Developed Land	
5.	Adders	
6.	Badgers	
7.	Bats	
8.	Newts	
9.	Nesting Birds	
10.	Giant Hogweed	
11.	Himalayan Balsam	
12.	Japanese Knotweed	
13.	Working Around Trees and Hedgerows	
14.	Be a Good Neighbour	
15.	Dust and Air Quality	
16.	Noise and Vibration	
17.	Bentonite	
18.	Cement and Concrete	
19.	Fuel and Oil	
20.	Pumping and Overpumping	
21.	Silt	
22.	Spill Control	
23.	Washing Down Plant and Machinery	
24.	Control of Road Sweeper Arisings	
25.	Segregation of Waste	
26.	Storage of Waste	
27.	Waste Hierarchy	
28.	Finding out what Re-Usable Resources are on Site	
29.	Soil Planning and Management	
30.	Stripping Topsoil	
31.	Stripping subsoil	
32.	Stockpiling Soil	
33.	Spreading Soil	
34.	Manufacturing Topsoil	



3. Site Management > Plant Use

[Useful documents / guidance](#)

The use of static and mobile plant on site can cause environmental issues through noise pollution, air pollution, potential for spills (hydraulic pipes bursts are the most common spills we have) and potential to damage existing features such as trees.

To reduce the risk:

- Ensure that any plant used is well maintained, calibrated correctly and arrives with MOT's as appropriate
- Ensure plant is energy efficient
- Ensure plant nappies are in place where applicable, to reduce the risk of spills
- Where plant is not in use, ensure they are switched off
- Liaise with the local council Environmental Health Officer (EHO)
- Install noise screen techniques where viable
- Monitor noise on site to ensure we are within acceptable limits
- Ensure no machines are in use prior to the time specified in your sites planning application
- Open a channel of communication with the public, keeping them informed of our works and what they can expect



3. Site Management > Energy Management

[Useful documents / guidance](#)

The purchase of energy is a significant cost to the Group. For example, at Sceptre House alone, we spend approximately £75,000 per annum. With the cost of energy rising, the amount we spend annually will only increase unless we address energy management in our offices, in the buildings we manage and on our live sites. Greater energy efficiency can reduce energy demand, reduce costs and lower emissions being emitted into the atmosphere. Below are some examples you can do to help:

- If feasible, connect to the main electricity grid, rather than running your site off diesel powered generators. It could save you 66%
- Review your supplier of energy & consider purchasing energy from renewable sources
- Carry out energy audits of owned assets
- Create action plans to reduce energy usage
- Ensure site cabins are energy efficient
- Turn off generators when not in use
- Turn off lights if they are not on sensors
- Shut down your laptops / tablets when away from your desk or at the end of the day and unplug any chargers when they are not in use
- If heating is on, ensure windows and doors are closed
- Only use the dishwasher when full
- Procure the most efficient white goods

Report your energy usage at the end of each month through either a KPI return or CSR return.



3. Site Management > Water Management

[Useful documents / guidance](#)

Water is a valuable commodity, especially in times of drought (an evermore common occurrence). As such, the cost of water is increasing, an already significant expense to the Group.

Reducing the amount of water we use is important both as a cost saving opportunity and to reduce carbon emissions. A recent study indicated that the industry could reduce water usage by 20% through the following:

- Installation of flow restrictors
- Installation of dual flush toilets
- Rainwater harvesting
- Changing our behaviours
- Procurement of more efficient systems
- Improved leak detection
- Fixing leaks sooner
- Carrying out water audits of owned assets
- Creating actions plans to reduce water usage
- Using treated / recycled water where viable

Report your water usage at the end of each month through either a KPI return or CSR return.



3. Site Management > Pests

[Useful documents / guidance](#)

Pests can be a common risk in a variety of projects we work on.

Demolition

Demolition of buildings containing a pest infestation can result in a dispersion of these pests into the surrounding area and may also result in the same pests infesting the new buildings.

Six weeks prior to the commencement of any demolition, individual blocks, properties and the surrounding area must be surveyed by professional pest control staff in order to identify the presence and extent of any infestations. Where infestations are identified, appropriate treatments must be implemented by the client to eliminate the infestation before demolition.



Sewers and rodents

Rats live in sewers and move through drainage systems. They come to the surface and enter buildings through breaks and faults in the drainage system. Capping, grubbing up or temporary sealing may be necessary and stop pests.

Site hygiene

Contractors must ensure that construction sites are kept as clear and tidy as possible. Accumulation of building materials can act as harbourage for pests, and must be removed and disposed of promptly and safely. All staff should not leave food waste within buildings under construction, as this will encourage pests to become established. Ensure food waste is disposed of in regularly removed wheelie bins.

Contact the Q&E team for further support. We use the Local Council services and Rentokil as specialist contractors to deal with pests.



3. Site Management > Flooding

[Useful documents / guidance](#)

Over recent years, the UK has been exposed to a rapid increase in the number of flooding incidents. In years to come, with continued climate change, the number of incidents will likely increase further and therefore, site management must prepare in advance.

The first step is to understand the site location and surroundings. You must identify watercourses in close proximity to site and establish flooding history of the area. Bear in mind, if a site has a river 50 miles away and the area has never flooded, it is still possible for flooding to occur.

Flood maps can be used to check site risks. These can be accessed through the Environment Agency website free of charge.



The Met Office and the Environment Agency both provide flood warnings and it is advised you subscribe to their free email or text alerts. These will form the basis of your flood plan and risk assessment which should include details of how to protect staff, hazardous equipment and minimise pollution risk as well as contact details for further help. In the event where you believe your site is at risk of flooding later that day, instigate a number of the below initiatives.

- Use sandbags to prevent flood water entering the offices and construction building if close to handover
- Move equipment and chemicals to a safer area
- Place sandbags in toilet bowls to prevent sewage backflow
- Move plant materials to high levels
- Turn off the electrical supply

Remember, the most important action you should take is evacuation of site, ensuring every operative and member of staff reaches a safe point. Upon returning to site, be aware there are still hazards as a result of flooding. These can be found in the 'Useful documents / guidance' section.



3. Site Management > Environmental Assessments

[Useful documents / guidance](#)

Projects may be subject to environmental assessment methods such as BREEAM or CEEQUAL as part of planning, client or funding requirements.

These assessments evaluate projects against a variety of criteria across different sections including; management, health & wellbeing, energy, waste, ecology, pollution, water and materials. They have a major impact on the design and construction phase of any development.

The Q & E department can assist with the environmental assessment requirements. Report these requirements to the Q & E department at an early stage.



3. Site Management > Environmental Inspections & Audits

[Useful documents / guidance](#)

Regularly inspecting your site will ensure conformance to internal policies, procedures and legislation / regulation and ensure your site is mitigating / reducing the risk associated with the project. It is an integral part of our management system and allows for intervention, where issues are identified. As a minimum, site management must complete an environmental assessment of site on a fortnightly basis.

In addition to a site management environmental inspection, the Q & E department will periodically attend site during the course of the project to carry out inspections / audits of the site works and associated records. The inspections / audits are carried out for a variety of reasons:

- As staff who don't attend your site daily, we have the capacity to give you an alternative view of your site activities and potentially see things that you don't
- We assess the Groups level of compliance with legislation, policies, procedures, environmental management systems and environmental assessments
- It allows us to find and analyse trends within the business. Without this knowledge, we could not improve

External audits are carried out annually in September / October by an independent body. Sites are chosen at random and these audits determine whether we achieve / re-certify our ISO accreditation.



4. Waste

We are committed to ensuring that best waste management practices are used on our projects. As a business, we spend in excess of £1,000,000 on waste each year. As costs of raw materials and waste disposal continue to rise, there is scope for significant savings.

Legal Duty of Care

**Waste Forecasting &
Reporting**

Waste Minimisation

Waste Storage

Waste Segregation

**Waste Container
Selection & Ordering**

Waste Champion

Demolition Waste

Excavation Waste

Construction Waste

**Canteen & Office
Waste**

Hazardous Waste



4. Waste > Legal Duty of Care

[Useful documents / guidance](#)

Waste duty of care records are a legal requirement and failure to comply could result in prosecution.

For compliance you must ensure waste is:

- Stored safely
- Handled or disposed of by authorised people (those with a waste carriers licence)
- Transferred to an EA registered waste facility
- A Waste Transfer Note (controlled waste) or Consignment Note (hazardous waste) needs to be fully completed for every load of waste. A season ticket is acceptable for waste streams with regular movements such as canteen waste collected fortnightly. The records must contain all the relevant information as described in previous sections of this toolkit
- Any waste exemptions have been applied for and accepted
- Copies of all licences, exemptions, season tickets and transfer notes need to be saved onto Wrightway and stored for a minimum of 2 years
- Consignment notes must be stored for a minimum of 3 years



56%

Of business are not complying with Duty of Care regulations.



1,072,000

Fly Tipping incidents reported in 2018/19 period



4. Waste > Waste Forecast & Reporting

[Useful documents / guidance](#)

Forecasting waste can have significant benefits for your project. Creating a Site Waste Management Plan (SWMP) at project inception is the easiest way to forecast / manage your waste and meet legal requirements.

Creating a SWMP allows your site to apply waste reduction techniques at the earliest stages of your project and in return, deliver higher cost savings via less waste production.

Recording and reporting waste produced by your site benefits our business and your site. It allows us to:

- Satisfy client requirements
- Achieve development requirements such as BREEAM criteria
- Improve performance by identifying areas where we can reduce waste and therefore save money

The Q & E department log all waste including sub-contractor waste for each business unit. This includes demolition, excavation and aftercare waste.

If you are using an alternative waste contractor to those defined in the procedure, you must report this to the Q & E department.

Project Waste Forecast		
Waste (tonnes)	Forecast	Actual
Mixed Construction	600.00	276.44
Wood	34.20	11.21
Plastic	0.45	0.02
Steel	1.58	2.67
Mixed Metal	55.58	31.98
Hardcore	15.75	20.24
Plasterboard	81.00	166.68
Inert	93.60	87.66
Cardboard	1.45	1.34
Packaging	74.23	89.20
Hazardous	0.45	0.03
Other	0.90	1.46
Total	959.18	688.93



4. Waste > Waste Minimisation

[Useful documents / guidance](#)

Applying waste minimisation techniques at the earliest stage of your project can generate significant cost savings through less waste production and therefore less skips. In addition, your waste could be someone's else raw material.

The best way to do this is to follow the waste hierarchy. Below are a few examples and questions you should be asking yourself and the supply chain.

- Avoid waste coming to site in the first place. For example; packaging is significant towards the final stages of the development. Can you arrange for your supplier of materials to collect the packaging? Can you reduce the amount of packaging coming to site? Can you arrange this for other materials like pallets and cable drums?
- Ensure that materials are not over-ordered and therefore discarded
- Properly stack and store materials in the required conditions ready for use. For example; store plasterboard within a building rather than outside during the winter months
- For inert materials / 6F2, can we re-use materials on site? Is there another Eric Wright site with a shortage of such materials? Does it make financial sense to transport these materials to the site rather than discard the material and procure new material?
- Can sub-contractors take any excess materials away for use on other projects?



4. Waste > Waste Storage

[Useful documents / guidance](#)

Waste storage areas should be in one location away from sensitive receptors or hazardous materials to reduce the risk of contamination.

The waste storage area should:

- Be sited as to not obstruct utility service points, access paths, or property entrances
- Be sited away from neighbouring property windows, boundary fences or fire exits
- Be sited and designed to minimise fire hazards
- Be sited on an impermeable surface and in a shaded area to reduce the potential for odour pollution
- Be of suitable size to contain the produced waste quantities

Skips should:

- Be covered to protect from adverse weather conditions
- Be segregated for construction and office / canteen waste and any other applicable waste stream. They should be labelled appropriately
- Be inspected daily



4. Waste > Waste Segregation

[Useful documents / guidance](#)

Effective waste segregation has many benefits to our business and the environment:

- Less waste is likely to go to landfill which makes waste cheaper to dispose of as it does not require the same manual or mechanical sorting as mixed waste. It is also better for people's health and the environment
- Better recycling rates reduce the demands on finite resources and the environmental impacts associated with the extraction, harvesting and processing of these resources
- Our carbon footprint is reduced as there is less transport and treatment costs
- It leads to a circular economy, as our uncontaminated waste can be another person's raw material. It also creates green jobs, promotes investments and leads to innovations

On some sites, waste segregation may not be practical for a variety of reasons such as space, number of waste streams or cost benefit of using mixed waste skips. As a minimum, all sites must segregate construction waste from office / canteen waste (skips vs. 660 / 1100 litre wheelie bins) and all plasterboard must be segregated from construction waste.



4. Waste > Waste Container Selection & Ordering

[Useful documents / guidance](#)

Skip hire is a critical part of site waste management and key to cost-effective and efficient waste disposal. If your skip is too big, you'll pay for any capacity you don't use and waste valuable space. If it's too small or the wrong type, you could disrupt operations on site, pay more for collections and miss opportunities for recycling. The below must be considered.

- 8 Yard skips are the most common skip used
- Using larger skips can result in cost savings – as long as they are filled correctly
- All skips, no matter the size should be filled correctly to reduce costs
- RORO skips should only be filled with **lightweight** materials. Filling these skips with heavy materials will add extra tonnage costs when a certain weight threshold is reached
- Wheelie bins must be used to segregate canteen / office waste from construction waste

All ordering must be done through your business units site support / regional office support function.

More lightweight materials required

8 yard



Average Cost: £184.00

14 yard



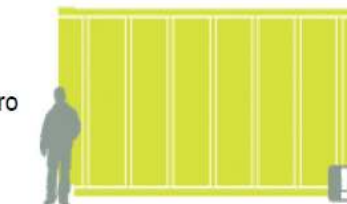
Average Cost: £252.00

30 yard roro



Average Cost: £604.00

40 yard roro



Average Cost: £1075.00

Average cost is for mixed waste



4. Waste > Waste Champion

All sites should nominate a waste champion prior to the commencement of site works.

The nominated individual is responsible for implementing the following:

- Waste segregation in line with the SWMP requirements
- Ensuring waste forecast / actual waste figures are up to date and monitored
- Waste reporting to the Q & E department where required
- Ensuring compliance with all duty of care legislation
- Managing excavation works in line with the Materials Management Plan
- Ensuring best practice on site including housekeeping
- Ordering and exchanging skips / containers when required



4. Waste > Demolition Waste

[Useful documents / guidance](#)

On projects that require high levels of strip-out or demolition, you must plan how you could potentially reuse the waste generated. Demolition waste can often be reclaimed and reused. Your waste can also be another person's raw material.

Performing a pre-demolition audit on your site can help you identify any materials that can be recovered and help you manage the materials that can't (asbestos, etc.). The earlier you perform the audit, the better, as this information is invaluable during the procurement process. As a result, the project will save money through disposing less waste and requiring less raw materials.

Examples of material recovery include:

- Using bricks, concrete, rocks and aggregate to increase site levels or to create a noise bund around the development
- Using soil to landscape the area
- Using road planings and rubble to build a temporary surface
- Donating materials such as doors / windows / timber to local charities

If you plan to move materials from one site to another, a waste exemption must be applied for. A waste exemption is a waste operation that is exempt from needing an environmental permit. Each exemption has specific limits and conditions that the holder must operate within.

All waste movements must be accompanied by the relevant duty of care records. This must have all the necessary information to identify the waste and must be kept on record for a minimum of 2 years.



4. Waste > Excavation Waste

[Useful documents / guidance](#)

Although many deem excavated materials such as topsoil or stone as a product, excavated materials are considered a waste unless proved in a documented Materials Management Plan (MMP). All projects planning to re-use excavated material must have an MMP in place for their operations. They must also ensure that any sensitive receptors are protected from silt pollution whilst stockpiling, and ensure dust is minimised.

Projects that require high levels of excavation must plan how to potentially re-use the waste generated. There are many benefits to the business and many ways in which we can re-use excavated materials, including:

- Re-using existing materials to make up site levels or temporarily landscape areas of site
- Transferring excavated material to another site for use
- Sourcing local exemption facilities which can use our material (farmers for example)

To do this, we must make sure we have the appropriate paperwork including any waste exemptions / permits in place. These documents have conditions that the holder must operate within. We must make sure we are within the conditions specified.

For sites simply removing excavated material from site, all waste movements must be accompanied by the relevant duty of care records. This must have all the necessary information to identify the waste and must be kept on record for a minimum of 2 years.



4. Waste > Construction Waste

[Useful documents / guidance](#)

Waste is an inevitable part of our industry. It can be prevented to a certain degree and minimised, but it will always be a factor in what we do.

Construction waste is any unwanted material we intend to discard that does not require special handling and disposal requirements. This can be a variety of waste streams including brick, block, metals, plasterboard, timber, plastics or packaging and includes waste such as road sweeper arising's. Inert and hazardous are also types of waste which can be generated through our activities, these are covered in other sections of the toolkit.

Construction waste movements must be accompanied by a waste transfer note. This must have all the necessary information to identify the waste and must be kept on record for 2 years. The information required includes:

- A description of the waste
- How the waste is contained or packaged
- The quantity of the waste
- The place, date and time of transfer
- The name and address of both parties
- Details of the permit, licence or exemption of the person receiving the waste
- The appropriate European Waste Catalogue (EWC) code for the waste
- The standard Industrial Classification code (SIC)
- Confirmation that the waste hierarchy has been adopted



4. Waste > Canteen & Office Waste

[Useful documents / guidance](#)

All cabin and office waste must be segregated from construction waste in either 660 litre / 1100 litre wheelie bins or specialist waste segregation systems provided by certain waste contractors. These can be segregated further into a variety of waste streams including paper, cardboard and general canteen waste. Mixing waste streams can cause contamination to materials that once could have been recycled if segregated, meaning higher removal costs for your site.

For disposal, all movements of waste must be covered under a waste transfer note or by a season ticket.

A season ticket is a single waste transfer note that covers multiple transfers of waste of the same description between two parties for up to 12 months. A typical example would be fortnightly collections of your canteen waste wheelie bins.

To obtain a season ticket, simply request one from your waste contractor. Ensure this is filed correctly in Wrightway and renewed after 12 months.



4. Waste > Hazardous Waste

[Useful documents / guidance](#)

Hazardous waste is anything harmful to human health or the environment, including:

- Asbestos
- Electrical equipment (WEEE)
- Oils
- Solvents
- Chemical waste such as batteries and pesticides

You must ensure the following:

- The properties of the waste (flammability, toxicity) are clearly labelled and managed accordingly with the product data sheets
- The waste is stored in leak proof containers away from sources of ignition
- The waste is kept under cover to prevent contamination of rainwater
- The leak proof containers are tightly sealed
- The waste is handled by trained person
- The waste is stored on an impermeable surface
- An inventory of waste is maintained
- The waste is transported by licenced waste hauliers to treatment or disposal facilities
- Each waste removal is accompanied with a consignment note for each removal

All waste movements must be accompanied by the relevant duty of care records. This must have all the necessary information to identify the waste and must be kept on record for a minimum of 3 years.



5. Procurement

Sustainable procurement can help save money, reduce waste, improve competitiveness and build our reputation. All aspects of procurement can assist us in creating a database of suppliers who share our vision / ethos, whilst providing the service we require.

Sub-contractor Procurement

Sub-contractor Appraisals

Supplier Procurement

Procurement of Materials



5. Procurement > Sub-contractor Procurement

We expect our supply chain to support us in achieving ‘best value for money’ for our clients. When choosing sub-contractors, the ideal scenario is a combination of whole life costs and benefits considering the environmental, social and economic impact of activities through design, material selection, manufacture, transportation, construction, usage and disposal.

Ensure sub-contractors:

- Are approved on the EWG sub-contractor database
- Meet the requirements of the proposed works
- Are competent to achieve the objectives set out by the Group
- Will comply with company environmental procedures and the site Environmental Management Plan (EMP)
- Understand the environmental constraints on our site
- Will engage positively and support our efforts to minimise disruption to the local community

Other things to consider:

- Are sub-contractors local to the site we are working on to reduce our carbon footprint?
- Will the sub-contractor provide additional equipment as standard to minimise disturbance?
- Does the sub-contractor have a history of working on similarly sensitive projects?



5. Procurement > Sub-contractor Appraisals

[Useful documents / guidance](#)

The construction industry has a lack of skilled workers. Numerous industry reports have demonstrated the decline in construction quality and productivity which has been attributed to the poor performance of sub-contractors.

With the majority of the Group's work being completed by sub-contractors, completing sub-contractor appraisals are one of the most integral activities we can do as a business. It allows us to continually monitor the performance of our supply chain, allowing site management throughout the Group to make the most informed decisions during the procurement process for all trades.

The appraisal itself takes approximately 10 minutes to complete per sub-contractor and scores each sub-contractor on variety of factors, including:

- Environmental performance
- Health & Safety performance
- Quality
- Adherence to programme
- Record keeping
- Compliance with brief

Every sub-contractor used on your site must receive an end of contract appraisal.



5. Procurement > Supplier Procurement

As a business, we should give preference to suppliers that can demonstrate responsibly sourced construction products. Responsible sourcing schemes are in their infancy but already form integral parts of schemes such as BREEAM, where suppliers are required to have an Environmental Management System like ISO 14001. As the bare minimum we should be procuring all timber products from legal and sustainable sources as defined by the UK Government Central Point of Excellence on Timber (CPET). Other products you can look at procuring from sustainable suppliers include:

- Concrete
- Plasterboard
- Bricks & blocks
- Insulation
- Steel
- Aggregates

Other things to consider:

- **Locality of supplies** – Using local suppliers can reduce environmental impacts including transport.
- **Packaging** – Reduce the amount of packaging products arrive to site in, or being involved in take back schemes can reduce our carbon footprint and the amount of waste we produce.
- **Plant selection** – Can your supplier source the correct plant for the job we are doing? Is there a better alternative?



5. Procurement > Procurement of Materials

Procuring sustainable materials involves consideration of the environmental, social and economic consequences of:

- Design, manufacture and production methods
- Logistics
- Non renewable material use
- Delivery of project
- Building use and operation
- Maintenance and repairs
- Disposal options

There are many advantages of sustainable procurement. Procuring materials from sustainable sources, such as suppliers with ISO14001 accreditation, can provide many advantages to the business, including long term efficiency savings and enhancing of our corporate image.

Other advantages include:

- Creation of a development with a lower embodied energy
- A more efficient and effective use of natural resources
- Reduced carbon emissions from source to site
- Use of less polluting and toxic materials
- A reduction in waste and pollution
- A reduction in the use of hazardous substances
- A more environmentally friendly development



6. Reporting

Reporting and analysis of activities is critical to all organisations and none more so than ours.

As a hypothetical example; a site is constructing multiple identical industrial units. A different site manager is responsible for each unit. One project manager notes the concrete specified for the units does not conform to building regulations. The project manager reports this to the other project managers before any concrete is poured. The specification is changed and the development continues.

Without this reporting, the effects to the development / business could be catastrophic. This is exactly the same for environmental reporting. The data enhances our ability to make more informed, evidence based decisions and allow us to identify trends and potential improvements that could be made to the business. The aim is to continually improve.

Incidents

Carbon Emissions



6. Reporting > Incident Reporting

[Useful documents / guidance](#)

Environmental incidents do happen on our sites. Incident reporting is an integral part of our Environmental Management System. We treat it as a learning process; providing us with an opportunity to give stakeholders an insight into our sustainability progress.

Should you have an incident on your site, whether it be discovery of invasive weeds, complaints from the public, waste incidents or a visit by regulators such as The Environment Agency, contact the Quality & Environmental Manager, line manager and your business unit representative immediately and complete the incident report form on Assure. Failure to report and act on such incidents could potentially result in an Environment Agency fine of £1,000,000, plus any additional clean up costs and disciplinary costs.



6. Reporting > Carbon Emissions Reporting

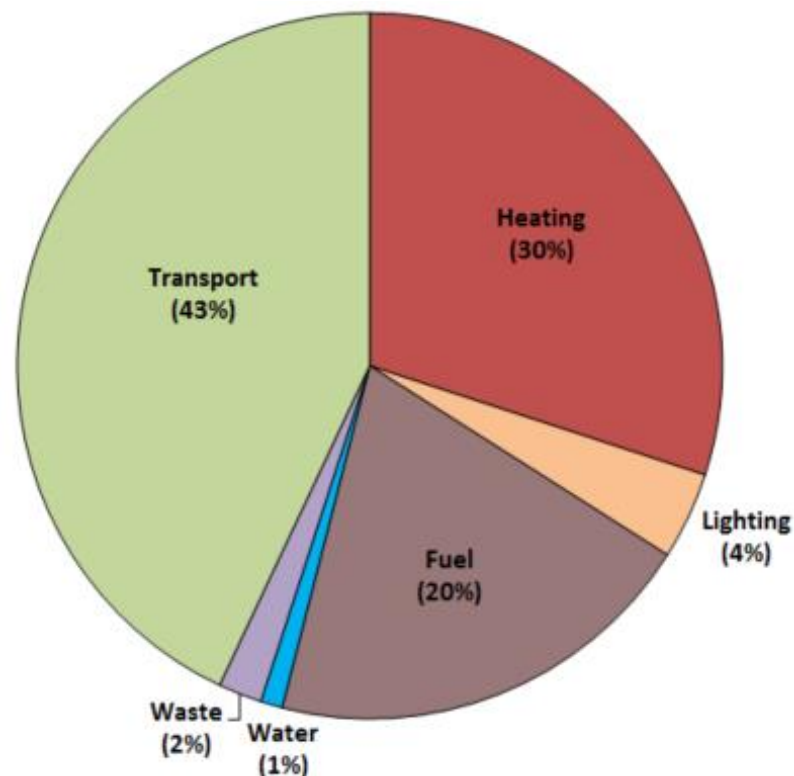
[Useful documents / guidance](#)

Key Performance Indicator (KPI) reporting is vital to our business. Below are a few examples of our business / project reporting requirements:

- Reporting monthly to the Eric Wright Trust
- Mandatory reporting introduced by the government in the form of the Energy Savings Opportunity Scheme (ESOS) and Streamlined Energy & Carbon Reporting (SECR). Failure to report results in fines and a damaged reputation
- Internal carbon reporting schemes such as Carbon Saver which show our commitment to reducing energy and is a great work winning tool
- Client reporting requirements
- Site specific reporting requirements such as BREEAM / CEEQUAL projects
- Tender bids

In addition to the above reporting requirements, calculating accurate emissions for the business allows for trend analysis. We can find areas within the business we can improve, reducing our bottom line

It is imperative the Q & E department receive timely, complete and accurate data sites from each site and each business unit



Glossary

Advanced / AMR meters

In addition to traditional metering functionality (measuring and registering the amount of energy which passes through it), AMR or advanced meters are capable of one-way communication allowing the automatic transmission of meter readings remotely, typically on a half hourly basis.

Building Research Establishment Environmental Assessment Method (BREEAM)

An environmental assessment method for measuring a building's environmental performance in terms of sustainable design. The assessment measures buildings against set criteria and best practice which then provides an overall environmental rating from pass to outstanding.

Building Management System (BMS)

A Building Management System (BMS) is a computer-based system installed to control and monitor a building's electrical equipment such as ventilation, lighting, energy, fire systems, and security systems.

Carbon footprint

A measure of the impact human activity has on the natural environment, and in particular climate change. The carbon footprint is a measurement of all greenhouse gases individually produced, which is recorded in tonnes of carbon dioxide.

Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL)

A sustainability rating and assessment scheme for civil engineering works.

Climate Change

A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Considerate Constructors Scheme (CCS)

CCS requires those sites and companies registered with the Scheme to care about appearance, respect the community, protect the environment, secure everyone's safety and value their workforce.

Corporate Social Responsibility (CSR)

A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders voluntarily.

Cycle to work scheme

A tax exemption which allows employers to loan cycles and cycle safety equipment to employees as a tax-free benefit to promote healthier journeys and reduce environmental pollution.

Display Energy Certificate (DEC)

A certificate which shows the energy performance of a building based on its annual energy consumption and the associated CO2 emissions. This is shown as a rating from A to G, where A has the lowest CO2 emissions and G the highest CO2 emissions.

Emergency Preparedness

A plan, or plans, which will be put into action in the event of an environmental emergency where negative environmental impact such as environmental damage could occur.

Energy Performance Certificate (EPC)

A certificate which shows a property's energy efficiency potential, running costs and environmental impact rating (carbon emissions). This is shown as a rating from A to G, where A is the best and G the worst.

Energy Savings Opportunity Scheme (ESOS)

ESOS is a mandatory energy assessment scheme for organisations in the UK that meet the qualification criteria. Organisations that qualify must carry out audits of the energy used by their buildings, industrial processes and transport to identify cost-effective energy saving measures every 4 years.

Environment Agency (EA)

The EA is the statutory body with responsibilities relating to the protection and enhancement of the environment in England.

Environmental Audit / Inspection

An investigation / assessment of the extent to which an organisation or site is observing best practice, complying with environmental regulations / permits and following the environmental management system to minimise harm to the environment.

Environmental Incident

Any emergency situation that arises on site which has the potential to damage or pollute the environment.

Environmental Management System (EMS)

An organisational management system that is used to develop and implement an environmental policy and to manage a company's interaction with the environment. A process which usually involves collecting information on the environmental performance of the organisation in order to track its progress against set environmental objectives, targets and standards. EMS's are often accredited to the ISO14001 standard.

Feed-in Tariffs (FiTs)

A government energy scheme that ensures that energy suppliers pay consumers for the electricity they generate from renewable or low carbon sources which is supplied back into the national grid. The scheme applies to most sustainable energy installations up to 5 mega watts.

Green tariff electricity

An electricity rate which is based on the supply of electricity from renewable energy sources to a property by a utility company.



Glossary

ISO 14001

An international standard used by organisations to help them to measure the success of their environmental management systems and assists in reducing their environmental impact. Often used as a guide for adhering to both environmental legislation and regulatory requirements.

Key Performance Indicators (KPIs)

A Key Performance Indicator is a measurable value that demonstrates how effectively a company is achieving key business objectives.

Leadership in Energy and Environmental Design (LEED)

An international green building certification system which measures a building's design against a set of performance categories.

Life-cycle Assessment (LCA)

LCA is a technique to assess environmental impacts associated with all the stages of a product's life from cradle to grave (i.e., from raw material extraction through materials processing, manufacturing, distribution, use, repair and maintenance, and disposal or recycling).

Materials Management Plan (MMP)

A mechanism by which those who are developing a site can comply with Environment Agency regulations for excavated ground materials.

Materials Recovery Facility (MRF)

A recycling factory which separates mixed (recyclable) material into their individual material streams using a variety of mechanical and manual processes. After processing, the materials are sorted into categories which are then prepared for sale into the commodity markets.

Polluter Pays Principal

An accepted practice that those who produce pollution should bear the costs of managing it to prevent damage.

Pollution Prevention

Any practice that reduces, eliminates or prevents pollution at source.

Rainwater harvesting

The concept of capturing rainwater and storing it for later use.

Renewable energy

Energy generated from sources that are naturally replenished such as solar, wind, tidal, geo-thermal heat and biomass.

Renewable Heat Incentive (RHI) Scheme

A government initiative that provides financial support to individuals and organisations that install renewable heating technology.

Site Waste Management Plan (SWMP)

A plan that sets out how resources will be managed and waste controlled at all stages during a construction project. No longer a legal requirement, but often part of contract conditions.

SKA Rating

An environmental labelling method which is designed to rate and compare the environmental performance of fit-out projects.

Statutory Nuisance

A matter that causes unreasonable and substantial interference in the use and enjoyment of a person's property. Examples of statutory nuisance include; noise, odour, vibration and light.

Streamlined Energy & Carbon Reporting (SECR)

A government led scheme to streamline the carbon and energy reporting landscape. It aims to help businesses increase productivity energy efficiency, as well as improve the security of energy supplies.

Sustainable procurement

The consideration of environmental, economic, ethical and social factors when making a purchasing decision. It may involve investigating what the product is made of, where it has come from and who has made it. Ultimately the aim is to minimise the environmental and social impacts of the purchases made.

Travel plans

A system used by employers to encourage staff to use alternatives to single-occupancy car use. Plans may include car sharing schemes, improving cycling facilities, a dedicated bus service or a restricted car parking allocation. A plan might also include the promotion of flexible-working practices such as remote access and video conferencing.

Waste Duty of Care

A legal responsibility to ensure that you produce, store, transport and dispose of controlled and hazardous waste without harming the environment.

Waste Electrical and Electronic Equipment (WEEE)

All electrical and electronic waste which is governed in the UK by the WEEE Regulations (2006).

Waste hierarchy

A waste minimisation concept which aims to reduce the amount of waste produced by maximising the waste materials' inherent value. The hierarchy encourages good waste management practice through several steps, starting with the prevention of waste, followed by the refurbishment of goods, value recovery through recycling and composting with waste disposal being the least step along the hierarchy.

Waste Management

Waste management includes the activities and actions required to manage waste from its inception to its final disposal.

Water Retailers

Provide a variety of functions including purchasing water from wholesalers on behalf of their customers. They must also be used to obtain relevant permits from the water providers.



Useful Links

General

Better Buildings Partnership (BBP)

Low carbon retro-fit tool

British Institute of Facilities Management (BIFM)

The institute for Facilities Management

Chartered Institute of Building Services Engineers (CIBSE)

The institute for Building Services Engineering

Environment Agency (EA)

The UK Government public body for the environment

Environmental Management Toolkit

Link to the toolkit, EWG documents and guidance documents held in the Management System of Wrightway

Institute of Environmental Management and Assessment (IEMA)

The institute for Environmental Management

NetRegs (NI & Scotland)

Environmental guidance for small and medium-sized businesses

Scottish Environmental Protection Agency

The Scottish public body for the environment

Utilities

Carbon Saver

Information on our Carbon Saver Gold certification.

Carbon Trust

A not-for-profit company with the mission to accelerate the move to a low carbon economy

Display Energy Certificates (DECs)

Guidance on Display Energy Certificates

Energy Institute

The professional body for the energy industry

Energy Performance Certificates (EPCs)

Guidance on Energy Performance Certificates

Energy Savings Opportunity Scheme (ESOS)

Guidance on the governments mandatory carbon reporting scheme.

Streamlined Energy & Carbon Reporting (SECR)

Guidance on the governments mandatory carbon reporting scheme.

Waterwise

Leading authority on water efficiency in the UK and Europe

Environmental Building Standards

Building Research Establishment Environmental Assessment Method (BREEAM)

BRE Environmental Assessment Method (for Buildings)

Green Spec

Construction industry guide to 'green' building design, products, specification and construction

SKA Ratings

A refurbishment sustainability assessment method

Waste

Chartered Institute of Waste Management (CIWM)

The institute for Waste Management

CL-AIRE

Industry standard for sustainable land use including Material Management Plans (MMPs)

Industry Council for Electronic Equipment Recycling (ICER)

Information regarding electronic equipment recycling

Recoup

The UK's leading authority on plastics waste management

Waste Resources Action Programme (WRAP)

A government body helping business and individuals reduce waste, use resources efficiently & develop sustainable products

Sustainable Living

2 Degrees Network

The world's leading collaboration platform and service for sustainable business

Cyclescheme

Tax free bikes for work through the Government's Green Transport Initiative.

<http://www.cyclescheme.co.uk/>

Green Commute Initiative

Tax free bikes for work through the Government's Green Transport Initiative.

WWF

Guidance on how to live life more sustainably



Contact Us

If you need any help or advice please contact your business unit representative:

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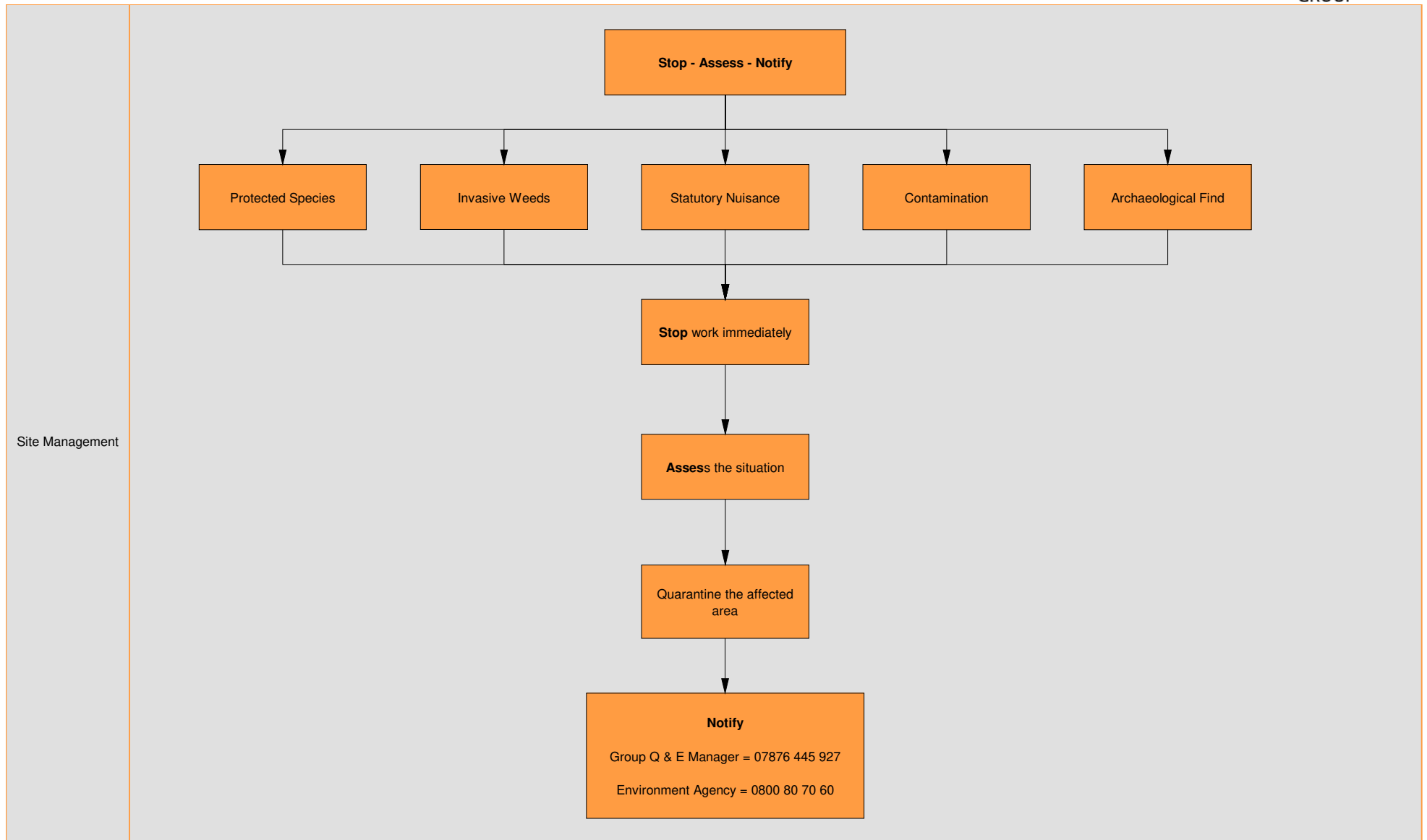
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Preparation

Phases of spill response



Site Management / Q&E Department

