newland
CONSTRUCTION LIMITED

ENVIRONMENTAL

&

SUSTAINABILITY

POLICY

Rev 1 July 2022

Contents

Section 1: General Policy Statement

We recognise that we have a major role to play in improving the quality of life in the areas we work, moving forward in partnership with employees, clients and agents, as we move into the new millennium. Our policies and practices will be guided by the principles that development now should support the ability of future generations to meet their needs and that everyone has access to a high quality environment. We will ask individuals and other organisations to follow the same principles. We commit to reasonable continuous improvement in all of our activities which have a significant impact on the environment.

We will

- Reduce air, land, water and noise pollution from our own activities.
- Reduce the movement of goods and the need to travel and encourage and promote walking, cycling, vehicle sharing, improved and integrated public transport and the best practicable environmental forms of accessible transport.
- Use local suppliers and sub-contractors to minimise transport and its associated CO_2 emissions.
- Work hard to preserve, restore and enhance our natural environment and make it safe, healthy and attractive and accessible for all.
- Reduce the consumption of goods, materials, and energy, avoid waste, conserve, re-use or recycle resources as appropriate.
- Aim to prevent or limit environmental accidents and to have contingency measures in place to minimise the effects if they do happen.
- Train key staff and educate all our staff and members, especially young people and businesses about their environmental responsibilities and our priorities and programmes.
- Encourage all individuals, organisations and agencies over whom we have influence to adopt, wherever practicable, similar policies and practices.
- Use the most environmentally responsible goods and services consistent with good performance and encourage all our contractors and suppliers to do the same.
- Improve energy and water conservation and management in our buildings.

In the preparation of this policy we have drawn on the expert advice offered by the Environment Agency, the National House Building Council, the Federation of Master Builders and the Local Authority. Also joint consultation has taken place between management and employees representatives, and future meetings will play a part in keeping this policy up to date.

The Policy will be regularly reviewed to take account of any changes in the nature or size of the business, and formally reviewed on at least an annual basis. Where the need arises, financial provision will be made to implement this Policy.

PM Newland

DIRECTOR

July 2022

Section 2: Benefits and obligations

Good environmental practice on site has many benefits: environmental, social and economic.

Environmental benefits

- Reduced damage to the surrounding air, water resources, land and to fauna and flora from potentially damaging activities
- Reduced demand for resources through better material selection, procurement and management, less wastage and greater use of recycled, reclaimed and sustainably sourced materials.

Social Benefits

- Reduced nuisance to neighbours by talking to the local community before and throughout the project, keeping them informed of any works that could cause a nuisance.

Economic benefits

- Improved opportunities to tender through demonstration of sound environmental performance and effective risk management
- No money wasted on fines for non-compliance with legislation and associated costs of clean-up, legal fees and management time
- Fewer delays to the project by identifying the characteristics of your site in advance of construction commencing, reducing costs incurred by detailed surveys,
- Less money lost through wasted resources that may have to be disposed of to landfill
- Improved environmental profile by establishing good relationships with environmental regulators and the local authority.

Our environmental policy requires the Site Agent to follow good practice on site and minimise environmental damage.

Obligations

From 6th April 2008 a site waste management plan is required for all new construction projects worth more than £300,000.00 (excluding VAT).

Section 3: Site Waste Management Plan

A SWMP is a live document. It must be updated throughout the course of the project.

The client is responsible for producing the initial SWMP before construction work begins.

We, the principal contractor are responsible for:

- Obtaining relevant information from sub-contractors
- Updating the SWMP at least every three months as the project progresses
- Keeping the SWMP on site during the project
- Ensuring that other contractors know where the SWMP is kept
- Allowing other contractors and the client access to the SWMP during the project
- Handing the completed SWMP back to the client at the end of the project
- Keeping a copy of the SWMP for two years.

For projects estimated at between £300,000 and £500,000 (excluding VAT) the SWMP should contain details of the

- Type of waste removed from site
- Identity of the person who removed the waste
- Site that the waste is taken to

For projects estimated at over £500,000 the plan should contain:

- Types of waste removed from the site
- Identity of the person who removed the waste and their waste carrier registration number
- A description of the waste
- Site that the waste was taken to
- Environmental permit or exemption held by the site where the material is taken

At the end of the project we will review the plan and record the reasons for any differences between the plan and what actually happened.

Section 4: General management issues

10 ways to save the planet

Putting our own house in order is a key part of our commitment to our policy. Distribution of this policy to our employees, clients and agents is our first major step to improving the planet.	
Here are 10 ways that you can help the planet while you work and help make our policy a reality.	
1. Remember the three R's. Reduce, Re-use and Recycle.	
2. Switch off. Switch off your PC, printer and lights at the end of the day. Leaving a PC on overnight uses enough energy to print 800 A4 pages.	
3. Use email. Don't use paper when you can email or talk to people. Don't print unless you have to.	
4. Become scrap happy! Re-use scrap paper, envelopes and toner cartridges.	
5. Commute by public transport or cycle or walk. Cycling and walking are healthier for you and the environment.	
6. Plant a message. Plants absorb noise and pollution and make your office more attractive.	
7. Don't waste water. London is drier than Rome and Barcelona. Make sure you turn taps off properly. A dripping tap wastes thirteen litres of water a day.	
8. Buy locally. Reduce transport by buying from local suppliers wherever possible.	
9. Use a mug. Only fill a kettle with enough water for your cup, or brew up for your colleagues.	
10. Take the stairs. It's better for you and the planet. In a year, one lift uses 4 tonnes of CO_2, the main greenhouse gas.	

Dealing with regulators

Be aware of and comply with all current and new environmental legislation and regulations	
Plan ahead and give regulators advanced warning of potential problems	
Give regulators the time they need to process your enquiry	
Always display the relevant emergency number for the regulators	
Ensure site personnel know the correct procedures for reporting incidents	
Always notify the environmental regulator of any reportable contamination	

Selecting and managing sub-contractors

Sub-contractors should present proof of their past environmental performance along with records of past and pending prosecutions – *see our Sub-Contractor Assessment Form*	
Ensure that sub-contractors have a copy of the site environmental management plan before beginning work	
Ensure sub-contractors attend environmental training sessions/inductions	
Ensure sub-contractors are aware of their environmental obligations on the project	
The contract should include requirements to follow good environmental practice	
Endeavour to use local sub-contractors wherever possible	
Audit performance of sub-contractors during the project	

Management and site control

Define environmental responsibilities	
Ensure everyone in the office and on site is aware of their responsibilities and liabilities	
Provide further training as necessary	
Through a site induction make everyone aware of project environmental issues and environmental standards	
Site personnel need to be aware of spill or other contamination response procedures and storage requirements	
When providing site facilities, prioritise energy efficiency measures such as lighting with daylight sensors, timed shut-offs and LEDs and A++ efficient appliances	
Adequately protect site against vandalism, theft and breakage	
Ensure consent has been granted to discharge water and effluent from the site	
A drainage plan identifying foul and surface water drainage needs to be accessible	
Identify nearby rivers, streams or groundwater etc. and ensure they are inspected regularly	
Appropriately mark drains to distinguish them	
Provide fuel bunds and/or internally bunded tanks	
Provide a waste storage area	
Wheel wash or road cleaning equipment should be provided as necessary	
Indicate all designated haul routes	
Display environmental awareness posters/bulletins	
Display warning signs on site prominently	

Managing materials

Assess the environmental performance of all suppliers	
Order the correct quantity of materials to arrive when they are needed to reduce the required storage time and risk of damage and theft	
Find out in what form materials will be delivered so that the appropriate unloading plant can be arranged and space set aside	
Encourage clients to only use sustainable resources	
Ensure deliveries are received by a member of site personnel who is able to carry out a quality inspection and ensure that the materials are unloaded to the appropriate place and take action if an accident occurs	
Select packaging materials for deliveries that can assist effective/secure storage and movement of materials on site minimising plastic where practical	
Recycle	
Arrange “take back” of packaging materials with suppliers	
Avoid sensitive times for deliveries, e.g. rush hour	
Endeavour to assess the environmental impacts of all working practices and product manufacture	
Endeavour to assess the whole life environmental performance of all purchases	

Managing site traffic

Develop a traffic management plan	
Designate an area of the site for site personnel's' vehicles	
Put procedures in place to prevent delivery vehicles from queuing outside the site boundary	
Minimise the number of deliveries by planning ahead	
Make delivery drivers aware of traffic restrictions on and around the site	
Delivery vehicle engines should be turned off while waiting to be unloaded	
Vehicles should be loaded and unloaded off the highway wherever possible	
Provide wheel washing facilities to avoid the spread of mud onto public highways	
Endeavour to use local suppliers wherever possible	

Liaising with the local community

Identify key local community representatives, such as parish councillors and keep them informed of progress	
Visit occupants of sensitive buildings and keep them informed of progress	
Prepare a leaflet and distribute it to nearby residents or occupiers. Provide updates or regular contributions to existing community newsletters	
Engage with the local community by working with local schools and charities	
Write articles about the progress on site for the local media	
Display a "Contact Board" at the site perimeter so that the public know whom to contact if they have a complaint or a comment to make. Use this board to display information on project phasing and other relevant matters	
Join a considerate contractor scheme	
Establish a complaint line and check that it works by calling it	
Deal with any complaints that arise quickly and in accordance with a defined complaints procedure. Create a log of complaints. Make sure all complaints are properly followed up and resolved	

Good housekeeping

Segregate different types of waste as it is produced and arrange frequent removal	
Keep the site tidy and clean, as a tidy site is a safe site	
Ensure that no wind-blown litter or debris leaves site	
Ensure that material and plant storage areas are properly managed, cover lightweight materials with sheeting if necessary	
Minimise the spread of the site	
Keep hoardings tidy – repair and repaint when necessary removing any fly posting or graffiti	
Frequently brush-clean the wheel washing facilities	
Keep haul routes clean	
Keep roads free from mud by using a road sweeper	
Ensure site is secure	

Security measures – site boundary

Secure the site boundary using perimeter fencing and high quality locks on gates. Solid barriers (e.g. hoardings) are more difficult to scale than chain link fences and prevent casual surveillance by prospective thieves,	
Do not stack materials against the inside or outside of a site boundary/fence as this can provide an opportunity for vandals and thieves to scale it	

Security measures – within site

Ensure that materials that are potentially hazardous are well secured. It is a legal requirement to lock fuel outlets when they are not in use, and provide secondary containment for oil in storage	
Secure plant to prevent vandalism ad immobilise plant and equipment over night	
If the site is large or at high risk from trespassers install deterrents such as lights, warning notices, 24-hour security guards, alarm, systems and Closed Circuit Television (CCTV)	
Monitor movement of people on and off site through the use of site passes or swipe cards	
Position the site manager's office to give a good view of the site	
Inform local police about the site and seek their advice on security	
Consult Fire Brigade for advice on storing fuel and flammable materials on site	
If the site experiences a problem such as vandalism or graffiti, ensure that appropriate clean-up/repair is undertaken promptly, to discourage further problems from occurring	

Monitoring

The Board of Directors will ensure that the Environmental & Sustainability Policy is reviewed as often as is appropriate, but at least on an annual basis, or at the instigation of any member of staff. This may be occasioned by a change in the nature of the work, or if new methods, substances or equipment are introduced. Also if new personnel or changes in responsibility occur or new legislation is introduced.	
The Policy may also be reviewed if it is shown to have any shortcomings or omissions. The various arrangements of the Policy will be monitored for effectiveness as indicated in each section.	
The Policy will be made available to all personnel by visual display at the Company Office and by distribution.	
Employees are encouraged to bring to the attention of their immediate Supervisor areas in which in their opinion the Policy seems inadequate. All such comments will be given every consideration.	
If upon review it is recognised that further training or new working methods are required then this will be implemented as soon as is practically possible	

Section 5: Environmental issues

Archaeology and built heritage

Watching brief	
Be prepared for unexpected finds whether or not known archaeological or historical features have been identified on your site	
During excavation look out for burned or blackened materials, brick or tile fragments, coins, pottery or bond fragments, skeletons, timber joists or post holes, brick or stone foundations and in-filled ditches	
If addressed at the right time and in the right way, finds may not necessarily affect the progress of the works	
If you are unsure about a find call in an archaeologist to assess it	
An archaeologist employed by the company may be able to agree suitable mitigation strategies by telephone with the planning authority archaeologist	
With the right advice the delay might be much less than any statutory period	

If any unexpected finds are encountered	
Stop work immediately in the area	
Protect the find by fencing/blocking it off and contact the site manager	
Contact the local archaeological officer at the local authority	
Consider seeking specialist archaeological advice on how to proceed	
If human remains are discovered a Home Office licence will be required before works can continue	

Contractor responsibilities (not expected to be an expert)	
Pursue the contractual obligations, e.g. providing attendances and/or access to professional archaeologists, sharing of Health & Safety documentation	
Protect known archaeological and heritage sites	
Report any significant finds arising during construction	

Buying, storing and managing materials

Materials resource efficiency	
When ordering avoid: • Over ordering • Ordering inappropriate lengths • Ordering for delivery at the wrong time	
When deliveries arrive on site avoid: • Damage during unloading • Delivery to inappropriate areas of site • Delivery of damaged goods • Accepting deliveries of incorrect specification or quantity	
When storing materials avoid: • Exceeding their shelf life • Damage or contamination from incorrect storage • Loss, theft and vandalism	
When handling materials avoid: • Damage or spillage through incorrect or repetitive handling • Delivering the wrong materials to the workplace	

Use of aggregates on site	
Ensure suitability for use • Make sure that materials do not contain contaminants and that pH levels are suitable for use where the site is located. This can be achieved by undertaking o A laboratory (UKAS accredited) analysis of contaminants present o Leachate tests for the contaminants identified	
Consultation • The environmental regulator has a remit to protect groundwater sources from contamination and must be consulted before any recycled materials are used in the ground • The laboratory results should be forwarded to the local environmental regulator Technical Team for approval to ensure that local conditions do not prevent the use of such materials	

Materials storage checklist (general) **Please note some of these points may be legal requirements. Check with your environmental regulator.**	
Store all containers of materials, such as oils and paints in a bunded area	
Clearly mark the area(s)	
Store materials in suitable containers that are appropriately labelled with fitted lids, taps and tops in good condition	
Put control measure in place and/or locate spill response kits/material near to bulk stores and ensure they are accessible and fully stocked	
Store material so as to guard against breakage, vandalism or theft	
Protect stores against flood damage or inundation	
Store waste in a designated area and separate into different waste streams	
Ensure the waste storage area is in good condition and contained to prevent rainwater infiltration	
Stockpiles should not cause silty run off	
Stockpiles should not be too steep and/or stored near drains or watercourses	
Store away from main site access roads	

Managing temporary works	
• Minimise materials bought specifically for temporary works	
• Recycle and re-use timber for formwork, hoarding, etc	
• Recycle and re-use materials, where appropriate, for temporary site facilities such as hardstands and parking areas	
• Retain and re-use using fencing and scaffolding wherever possible	
• Ensure that new timber purchased is from verifiable sustainable sources	

Managing stockpiles	
Store topsoil for reuse in piles less than 2m high to prevent damage to the soil structure	
Segregate different grades of soil	
Position spoil and temporary stockpiles well away from watercourses and drainage systems	
Minimise movements of materials in stockpiles to reduce degradation of the soil structure	
Silty water formed by erosion of the stockpile must be managed correctly	
Direct surface water away from the stockpiles to prevent erosion at the bottom	

Place silt screens around spoil heaps to trap silt in any surface water run-off	
Vegetate long-term stockpiles to prevent dust in dry weather conditions, and reduce erosion of the stockpile to form silty runoff. Ensure adequate weed control	

Refuelling protocol	
Designate a bunded refuelling area preferably isolated from surfaced water drains. If not possible; install an oil separator in the surface water drainage system	
Avoid using remote fill points. Where these are unavoidable install suitable oil separators to the surface drainage system	
Avoid refuelling close to watercourses. Where this is unavoidable use drip trays and keep materials such as absorbent pads or booms readily available in case of spillage	
All refuelling must be supervised. Do not leave valves open unattended (N.B. auto-close valves may be a legal requirement)	
Keep an emergency spill kit at each refuelling point. If mobile refuelling is carried out, ensure each bowser carries a drip tray and a spill kit	
Bowsers should have an automatic cut out	
Ensure that personnel carrying our refuelling are aware of the protocol and know what actions to take in an emergency	

Storing fuels and chemicals	
Securely store all containers of potential pollutants (e.g. fuels, oils and chemicals|) according to oil storage legislation	
Label containers clearly so that appropriate remedial action can be taken in the event of a spillage	
Regularly check taps and hoses for leakage	
Avoid storing drums tightly against each other. Store drums so that they can all be inspected for leaks	
Prevent damage from vandalism. Ensure that all valves and trigger guns are vandal and tamper proof	
Clearly mark the contents of any tank. Display a notice that demands that valves and trigger guns are locked when not in use	
Store tanks or drums in a secure bunded container or compound that is locked when not in use	
It may be necessary for chemicals to be stored on an impermeable base in areas of groundwater risk. This should be identified in the contract but consider discussing with the environmental regulator	
Provide separate fill pipes for each tank unless the tanks are interconnected by a balance pipe of greater flow capacity than the fill pipe	
Mark fill pipes with the product type and a tank number where there is more than one tank	
Before moving a drum check the bung is secure	

Bunding tanks	
To avoid accidental spillage, bund tanks with a minimum capacity of 110% of the volume of the largest tank or 25% of the total storage capacity, whichever is the greater	
Do not allow bunded areas to fill with rainwater or slops (ideally, provide a cover)	
Empty any water collected in an appropriate way	
Site tanks away from vehicle movements and mark them clearly so that they are visible and so that people know they are a potential risk	
Do not put tanks where there is a direct link to surface drains, watercourses or sewers. Avoid placing tanks on unmade ground, to reduce the risk of soil contamination. Protect from vandalism.	
The bund should be impermeable to the substance that is being stored in the tank	
Position air vent pipes so that they can be seen easily and directed to that any discharge (e.g. in the event of the tank being overfilled) is directed down into the bund	
Fill points should be inside the bund	
Fit any pumps sited outside the bund with a non-return/check valve installed in the feed line	

Dust emissions and odours: avoid causing a nuisance

Avoiding dust generation

Haul routes	
Select suitable haul routes away from sensitive receptors if possible	
Reduce the length and width of haul roads (while still allowing two way traffic) to minimise surface area from which dust may be produced	
Pave heavily used area or use geotextiles, e.g. around batching plant and haul routes. Sweep these regularly	
Sweep public roads regularly using a vacuum sweeper	
Limit vehicle speeds – the slower the vehicles the less the dust generation	
Damp down	

Demolition	
Use enclosed chutes for dropping demolition materials that have the potential to cause dust. Regularly dampen the chutes	
Consent, under EPA 1990, is required for the use of mobile plant for crushing materials such as bricks, tiles and concrete	
Locate crushing plant away from sensitive receptors	
Do not use drills that are powered by compressed air as these generate large amounts of dust	

Plant and vehicles	
Clean the wheels of vehicles leaving the site so that mud is not spread on to the highways	
Ensure that exhaust fumes are directed upwards and not directly at the ground	
Retractable sheeted covers on vehicles must be used to cover material to enclose dust	
Ensure all plant and vehicles are in good working order with an up-to-date maintenance log	
Vehicles must keep to site speed limits to reduce the risk of dust clouds	

Materials handling and storage	
Locate stockpiles out of the wind (or provide wind breaks) to minimise the potential for dust generation	
Keep the stockpiles to the minimum practicable height and use gentle slopes	
Compact and bind stockpile surfaces (in extreme cases). Revegetate long term stockpiles	
Minimise the storage time of materials on site	
Store materials away from the site boundary, main site access roads and downwind of sensitive receptors	
Ensure all waste skips are enclosed or covered by tarpaulin	
Minimise the height of fall of materials	
Damp down earthworks during dry weather	

Concrete batching	
Mix large quantities of concrete or bentonite slurries in enclosed areas to avoid generating dust	

Cutting/grinding/grouting/packing	
Minimise cutting and grinding on site where possible	
In cutters and saws, use equipment and techniques such as dust extractors to minimise dust. Consider a wet cutting saw or use vacuum extraction or block splitters	
Spray water during cutting of paving slabs to minimise dust	

<u>Preventing emissions and odours</u>

Vehicles and plant	
Keep vehicles and plant used on site well maintained and regularly serviced. Ensure that all vehicles used by contractors comply with MOT emissions standards at all times	
Encourage the use of electric/hybrid vehicles and, where appropriate, plant	
Control deliveries to site to minimise queuing	
Make sure that engines are switched off when they are not in use	
Keep refuelling areas away from the public	

No fires on site	
The **only** known exception to this is the burning of Japanese Knotweed with consent	

Waste storage	
To avoid odours use covered containers for organic waste (e.g. weeds and other vegetation) and remove frequently	

Chemicals on site	
To avoid odours: • Take account of the wind conditions when arranging activities that are likely to emit aerosols, fumes, odours and smoke	
• Position site toilets away from residential areas	

Ground contamination

Getting to know your site and remedial plans	
Carry out preliminary investigation of site using a tiered risk assessment approach as set out in Model Procedures for the Management of Land Contamination (CLR 11)	
Undertake an exploratory investigation of the site to characterise contamination on site in terms of: • Type • Concentration • Extent	
Develop remedial plan from results of preliminary and exploratory investigations	
Agree remedial plan with local planning authority and make available to contractor	
Ensure relevant permits are in place for any remedial works required	

Avoid causing or spreading contamination	
Do not stockpile contaminated soil unless it cannot be avoided. If it is necessary, stockpile only on a hard standing area to prevent contamination of underlying ground	
Cover over stockpiled material, either to prevent windblown dust (potentially contaminated) or to prevent ingress of rainwater	
Control surface drainage from stockpiled area. Water draining from a stockpile may be contaminated and need controlled off-site disposal	
Be careful when handling, storing and using oils and chemicals	

Visual signs	
Discoloured soil (e.g. chemical residues)	
Unexpected odours (e.g. hydrocarbons)	
Fibrous texture to the soil (e.g. asbestos)	
Presence of foreign objects (e.g. chemical/oil containers/waste)	
Evidence of previous soil workings	
Evidence of underground structures and tanks	
Existence of waste pits	
Artificial ground where the level has been raised by man's activities and not due to a natural cause (e.g. slag heaps)	
Old drain runs and contamination within buildings; tanks, flues, etc.	
Topsoil near motorways can be contaminated by particulate deposition	

Noise and vibration: the need to control it

Noise	
Change the working method to use equipment and modes of operation that produce less noise. For example: • In demolition works use hydraulic shears in place of hydraulic impact breakers • In driving steel sheet piles consider the jacking method (subject to soil conditions, e.g. cohesive soils), which produce only a fraction of the noise of conventional hammer-driven piling • When breaking out pavements consider other methods than pneumatic breakers and drills, including chemical splitters or falling weight breakers	
Reduce the need for noisy assembly practices, e.g. fabricate off site	
Keep noisy plant as far away as possible from sensitive receptors	
Adopt working hours to restrict noisy activities to certain periods of the day	
Switch off plant when not in use	
Arrange delivery times to suit the area – daytime for residential areas, perhaps night time for inner-city areas	
Route construction vehicles to take account of the need to reduce noise and vibration	
Keep haul roads well maintained	
Use mufflers or silencers to reduce noise transmitted along pipes and ducts	
Minimise the drop height into hoppers, lorries or other plant (reducing the drop height by a factor of 10 reduces noise by about 10 dB)	
Consider using rubber linings on tippers in very sensitive sites	
Liaise with nature conservation bodies to minimise noise disturbance (disruption) to any sensitive wildlife	

Screens	
Where possible, place sources of noise away from sensitive receptor	
Avoid sound-traps that amplify noise	
Erect the screen close to the source of noise	
Build the screen from materials with density of 7kg/m² or higher; with panels stiffened to prevent drumming	
For the most effective results build the screen about 1m above the highest sight line	
Seal all gaps and openings, including gaps at the bottom of the screen	
Glaze any public observation openings in perimeter hoardings with Perspex (protected with wire mesh or similar) if sensitive receptors are lower than the height of the hoarding	
Consider placing additional screens close to sensitive receptors but not parallel to nearby walls	

Vibration	
Change the working method to use equipment or modes of operation that produce less vibration, for example; • Breaking out concrete, where practicable, should be undertaken using equipment which breaks concrete by bending rather than by percussion • Where practicable, rotary drills and bursters actuated by hydraulic or electrical power shall be used for excavating hard material	
Undertake vibration activities as far away as possible from sensitive receptors	
Adopt working hours to restrict high vibration generating activities to certain periods of the day	
Suitable anti-vibration mountings should be fitted where practicable to rotating and/or impacting equipment	
Keep haul roads well maintained	
Consider using rubber linings on tippers in very sensitive sites	

Light pollution

Programme activities to take advantage as much as possible of natural light	
Where possible, position temporary lighting away from sensitive receptors. Use directional lighting and direct light downwards. Use screens / cowls where applicable to help with this	
Avoid creating shadows that could create additional site hazards	
Use LED luminaires whenever possible	
Make sure that any artificial lighting does not change the apparent colour or visibility of any safety signs or other safety related items	
Arrange vehicle and plant movements to suit the environment, eg daylight hours for residential areas	
When lighting the site perimeter, avoid creating shadows that could put pedestrians or other road users at risk and avoid creating glare	

Traffic management and vehicle use

Traffic management plan	
Identify sensitive areas (e.g. schools and homes)	
Be aware of road restrictions either through road works, narrow roads and bridges, with height and/or weight restrictions	
Use suitable materials on access roads – to avoid mud and dust being produced	
Have the details of other developments whose activities could impact on the project	
Identify the locality of suitable parking facilities for private cars and plant	
Ensure there are designated walkways on and around site	
Ensure there are designated vehicular routes on site with speed restrictions	
Locate site entrance and exit so they are not off minor roads wherever possible	
Gain permission for road closure from the Highways division of local authority in smaller scale projects (Highways Agency for larger project)	
Ensure road closures are carried out by a competent person	
Develop a map showing delivery drivers routes to site from trunk roads	
Schedule site deliveries outsides times of peak traffic volume	
Have designated personnel on site to receive deliveries, direct vehicles on and off site, and act as banksman	

Project vehicles should display a badge on the windscreen stating project contact details, so the driver can be contacted if the vehicle is found to be parked inappropriately	
Offer alternative modes of transport for personnel to site, e.g. use of minibuses, car sharing or bicycles	
Make use of electric/hybrid vehicles wherever it is appropriate to do so	
Identify alternative delivery streams, e.g. canals and railway if feasible	
Monitor vehicle movements to reduce the likelihood of queuing or causing congestion in and around the local area	

Parking	
Designate an area on site for site personnel parking	
Prevent delivery vehicles from queuing outside the site boundary	
Make delivery drivers aware of traffic restrictions on and around the site	

Plant and vehicles	
Use a wheel wash for vehicles leaving the site to prevent mud being spread on surrounding roads	
Prohibit vehicle washing on site save where this is necessary to prevent pollution	
Ensure that exhausts do not discharge directly at the ground	
Use retractable sheeted covers to protect wind blown material	
Ensure all plant and vehicles are in good working order, carry out regular servicing and maintenance	
Reverse sirens – consider lorries with “white noise” alarms to minimise noise impact on local residents	
Should emergency maintenance need to be carried out on site, ensure it is in a designated area away from sensitive receptors and that a spill kit is close to hand	

Delivery schedule	
All deliveries to site should keep to their allocated time slot. Failure to do so could mean they are turned away	
No deliveries will be accepted on site without contactor personnel to unload them or direct the vehicle	
No materials or rubbish to be left in the unloading area	
Wash-out must occur only in designated wash out areas	
All vehicle delivery drivers are to wear PPE once inside the delivery area	
Incorrectly loaded vehicles will not be offloaded	
During unloading, ropes and fixing devices should be removed with caution. WARNING: risk of load slipping when ropes removed	

Site rules for drivers	
Access to and from site will be only via the main entrance gates	
On leaving the site, vehicles to follow the directions previously given	
All engines to be switched off whilst waiting to unload	
No parking in residential streets surrounding the site	
All vehicle drivers are asked to proceed with caution particularly at peak school times in the vicinity of local schools	
Drivers must adhere to the site speed limit	
All vehicles entering the site must stop and report to the gateman who will direct them to their required place of loading/unloading	
Avoid the need to reverse where possible, otherwise a competent banksman must be present	
Whilst on site, drivers are asked to remain in their cabs at all times, unless operating vehicle sheeting mechanism or using the welfare facilities	
Drivers are asked to park in the designated area and wear appropriate PPE (safety helmet, boots and hi-viz jackets) while away from their vehicles	
All loaded vehicles leaving site must be sheeted – this should be done using an "Easy Sheet" mechanism prior to entering the wheel wash	
All vehicles must pass through the wheel wash facility and be inspected by the gateman to ensure they are clean before leaving site	
All loaded vehicles leaving site must take the correct documentation with them. Ensure relevant copies of documentation, together with a copy of the weighbridge ticket are handed to the gateman on your return to site	

Waste

Storing wastes properly on site	
Segregate waste. Make this easy for site personnel to do, by providing a number of waste containers in a designated waste storage area and briefing them on their requirements	
Explore recycling opportunities in the local area where appropriate	
Mark waste containers clearly with their intended contents. Consider using colour coding/labelling	
Use containers suitable for their contents. Check that containers are not corroded or worn out	
Use covered skips to prevent spread of wind blown wastes	

Storing of hazardous waste	
Check that your premises are registered as a producer of hazardous waste, if more than 200kg (applicable in England and Wales, not Scotland)	
Ensure hazardous wastes are stored in suitable labelled containers away from sensitive receptors and the risk of damage by site traffic	
Hazardous waste must not be mixed with non-hazardous wastes	
Avoid missing different type of hazardous waste together	
Do not store wastes longer than is necessary to complete documentation to arrange its disposal	

Handling and removing waste (on a confined site)	
If removing waste from upper levels on buildings transport using rubber bins	
Store these bins in an area close to lifts	
Arrange for daily collection of bins	
Only lower bins to ground floor shortly before collection lorry arrives	

Duty of care	
Check that you have a copy of the waste carrier's licence on site and that it is still valid, the waste carrier's licence should be accepted only if the environmental regulator has endorsed it	
The waste carrier must be licensed to carry waste	
The transfer notes should be completed in full and contain an accurate description of the waste, full European Waste Catalogue (EWC) code, and signed by the producer and carrier before waste leaves the site	
Keep copies of all transfer notes for waste sent off site for two years for inert and five years for hazardous	
Hazardous waste movements must be documented using consignment notes rather than the normal waste transfer note	
Carry out spot checks to ensure compliance with your duty of care including: • Follow waste carrier to ensure the waste arrives at the agreed disposal site • Carry out periodic audits on your waste carrier • Visit your waste carriers premises • Visit agreed disposal site to confirm it is licensed to accept your waste	

Water

Know your site	
Establish water quality by undertaking baseline assessments before work starts on site	
Protect/cover all drains	
Ensure that the correct connections are being made with either foul sewers, surface water drains or combined systems	
Identify all water bodies, gain appropriate consents and put measures in place to fulfil the requirements of your consent	
Minimise the use of water	
When providing site facilities, prioritise measures to limit water use such as low flush toilets, motion detection and timed shut off taps etc	

Abstracting water	
Ensure the site has a licence to abstract water from a controlled water source	
Ensure the site complies with the abstraction licence	

Discharging water	
Check that appropriate consents for disposal of all water are in place, and that personnel are aware of the quantity and quality of water than can be discharged	
Check for any visible sign or smell of pollution in watercourses at or near the site	
Water needs to be treated effectively before disposal	
If a settlement tank is being used, check it is working	

How and what to monitor	
Establish a regular monitoring procedure for water discharged from the site and keep records (turbidity, flow rate)	
Check outfalls and pipe work daily to ensure they are clean and clear of litter etc.	

Avoiding spillages	
Store liquids, solids and powders appropriately, and away from drains and watercourses in secondary containment	
Store solvents, chemicals or paints in accordance with their COSHH data sheets	
Appropriate spill kits should be available (e.g. oil only, chemical or general use) and ensure they are adequately stocked	

Emergency preparedness and response	
Ask site personnel if they know who to contact in the event of a spillage, what to do and where to get equipment from	
Adopt and test an emergency response plan	
Nominate a spill contractor to deal with major incidents	

Managing run-off and silty water	
When undertaking earthworks ensure a filter strip has been left to protect surface water	
Regularly check watercourses (if applicable)	
Look for any visible signs of discolouration in watercourses (if applicable) at or near the site	
Silty or discoloured water should not be discharged from the site	
Surface water runoff should not be directly entering a watercourse or drain	
Monitor any water treatment methods to ensure their effectiveness	
If a settlement tank is used, see if water is moving too fast and/or overflowing (other than at the discharge point)	
If straw bales are used, ensure they are securely fixed	

Managing effluent	
Wash out concrete lorries in a suitably contained designated area	
The designated washout area has to be at least 10m away from drains and watercourses	
Protect watercourses and groundwater from washout	
Put a plan in place to cost effectively dispose of washout	

Working over or near to water	
Avoid storing fuel in vessels near water	
Check to see if any site works will be within 10m of the edge of watercourses	
Check that the banks or bed of the watercourse outside the area of works is not being affected by discharges or vehicle movements etc.	
Spray, dust or other airborne materials should not enter a watercourse	
Approach ways to the watercourse should be kept free from the build up of mud	
If using a cofferdam to retain water, it needs to be in good condition and working effectively	
Check the watercourse to see if it is silty or discoloured downstream of the works or if there is an oily sheen visible on the water	
Ensure spill kits are adequately stocked	

Personnel are to be aware of the location of spill kits and know how to use these properly	
Mitigation measures to be put in place in the event of an emergency (e.g. booms across river)	

Settlement tank/lagoon	
Design	
The size of the tank/lagoon should be adequate for the settlement time required and the rate at which water flows or is pumped into it	
Install a long, narrow, shallow settlement lagoon to ensure maximum retention time of all water in the lagoon	
Operation	
Obtain a consent to pump clean water from the surface of settlement lagoons into rivers or designated discharge point	
Clean the entry chamber periodically to prevent a build-up of silt	
Periodically monitor the outflow quality	

Dealing with water in excavations	
Measures should be put in place to prevent water from entering excavations	
Inform the environmental regulator before any excavation below the water table, including any site dewatering	
Control water in excavations by stone-filled edge drains leading to sumps	
To manage groundwater flowing into excavations, install cut off ditches, walls or well point dewatering	
Obtain a discharge consent for water from excavations	

Pontoons and barges	
All fuel tanks to be secure and safe on the vessel so that there is no chance of collision damage or accidental spillage overboard	
Contaminated bilge water should be pumped to suitable facilities ashore or absorbents used	

Ecology and biodiversity

What to look out for on site	
Liaise with the client / their specialists to identify protected species and habitats that could affected before work begins. Help on European and other laws is available at www.gov.uk/guidance/construction-near-protected-areas-and-wildlife	
You may need to check with the local planning authority or Natural England on what you can and cannot do by law. This varies from species to species.	
Where required, adhere to the client's Land and Ecological Management Plan (LEMP).	
Plan the work to avoid disturbing protected species, blocking access to or damaging habitats. .	
If planning and programming will not be sufficient, use other mitigation measures. You may need assistance from an Ecologist to survey and determine the most appropriate measures	

The list of protected species includes (not exhaustive): • bats (all species) • great crested newts • hazel or common dormice • otters • natterjack toads • reptiles (some species) • protected plants (some species) • large blue butterfly • badgers • water voles • wild birds • ancient woodland and veteran trees If found, do not damage, destroy or obstruct a breeding or resting place, even accidentally, and do not try to relocate them without prior legal permission	
Nesting birds • If found, do not disturb or cut down trees or shrubs. To avoid accidental disturbance do not fell or clear any trees or shrubs between March and July	

Working near water	
Place a protective bund around ponds to prevent water pollution	
Dewatering can affect the ecology of wetlands around the site. Consider monitoring water levels during the works	

Avoiding damage to trees and hedgerows	
Keep vehicles and plant away from them	
Put up temporary fencing to mark out the area	
Do not cut or damage any roots greater than 25mm in diameter within the protected area	
Cut roots only with a clean hand saw, not a spade or mechanical digger	
Wrap damp sacking around any exposed roots until ready for backfilling	
Backfill holes with care, to ensure that roots are not damaged and compact backfill lightly.	
Do not store spoil or building materials within protected area or under tree canopy	
Keep toxic materials such as diesel and cement well away	
Always avoid damaging bark or branches	