

Balfour Beatty



**Supplier Health, Safety,
Environment, Quality and
Sustainability Conditions**

HSES-RM-0018a Issue 1.2

“Our supply chain is much more than a group of individual sub-contractors and suppliers: it is a key part of our business, core to our own performance and reputation as a company.

*We aim to build strong, long-term partnerships with these companies, based on shared values, to help us deliver excellence to our customers. Working in partnership means we **can**, together, constantly improve quality, efficiency, and safety.”*

Leo Quinn, Balfour Beatty, Group Chief Executive

OUR ZERO HARM VISION

“At Balfour Beatty we believe that our long-term success as a business is dependent upon the ability to keep our workforce, our business partners, our suppliers, our subcontractors, members of the public and the environment safe. Nothing that we do is so important that it cannot be done safely.”

Elimination of risk will be at the forefront of what we do, from winning business, through developing, planning, design and construction - and onward into operations and maintenance. It will feature prominently in the business we pursue, who we work with, how we work and how we measure performance and encourage the personal advancement of our employees.

It will become the fabric of our culture.

OUR COMMITMENT:

We will:

- **Position** people, environment and sustainability at the heart of what we do
- **Act responsibly** to protect and enhance the physical and social environment in which we operate
- **Work with and support our customers** with the provision of innovative and effective infrastructure
- **Treat health like safety**
- **Challenge the norm** and promote industry-wide action to eliminate and reduce risks to the safety of everyone
- **Tackle occupational ill health** and protect our environment, and through working with others
- **Continue to have a recognised, influential voice** in the industry and be the contractor of choice, with Zero Harm at the core of everything we do

OUR FOCUS

We will deliver our commitment to 'Build to Last' by focusing on:

Innovating and Improving

- Pursuing every opportunity to eliminate and reduce risk through health and safety by design
- Keeping pace with change
- Health, safety, environment and sustainability from concept to completion

Leading

- Visible leadership for health, safety, environment and sustainability
- Leading the industry to drive improvements

Engaging

- Collaborative engagement with our customers & everyone who works with us
- Working with our supply chain to ensure clear competence
- Health, safety, environment and sustainability embedded in everything we do – how and why we do business

GOLDEN RULES

Balfour Beatty referred to as "*the Company*" throughout this document, operates around the principles of four Golden Rules. These rules underpin all that we do as we strive to create a business that will deliver Zero Harm:

BE FIT FOR WORK

- Advise your Supervisor/ Manager prior to starting work if you have any health issues (mind and body) which mean you are unfit to work

ALWAYS RECEIVE A BRIEFING BEFORE STARTING WORK

- Only start work once you have been briefed and fully understand the task, associated risks, controls and rules
- Follow all rules

REPORT ALL UNSAFE EVENTS AND CONDITIONS

- I will take care of myself and others at all times, positively intervening when something is not safe or correct
- I will ensure that I maintain equipment issued to me in a satisfactory condition and report any defects immediately to my supervisor

STOP WORK IF ANYTHING CHANGES

- Ensure that work stops and your Supervisor/Manager is informed when there are changes to the planned safe system of work, or if you are concerned that the activities are unsafe
- *The Supplier* must make any provision necessary to ensure non-English speaking employees can understand all information necessary to carry out their duties in a safe manner. Each non English speaking gang must be supervised by a bi-lingual supervisor (bi-lingual in English and the appropriate foreign language) who will be responsible for instructing them in the safe systems of work

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ABBREVIATIONS

CITB	Construction Industry Training Board
ATPMS	An Auditable, Tamper Proof Hand Arm Vibration Exposure Management System
SMSTS	CITB - Site Safety Plus - Site Management Safety Training Scheme (SMSTS)
SSSTS	CITB - Site Safety Plus - Site Supervisor Safety Training Scheme (SSSTS)
WPP	Work Package Plan
PMP	Project Management Plan
PVPMP	People, Vehicle and Plant Management Plan
JV	Joint Venture
BMS	Business Management System
Project	A Contract or a Framework incorporating a number of individual contracts with the same Employer; or a Business Stream level procurement requirement to service a number of smaller, similar individual projects (for example Balfour Beatty Ground Engineering)
<i>The Company</i>	<i>The Company</i> , for the purposes of this document, is the Contractor referred to within the Subcontract, Consultancy Agreement or Design Agreement
<i>Site Lead</i>	<i>The Company's employee who is appointed to lead a Contract or a Framework on behalf of the Company</i>
<i>The Supplier</i>	<i>The Supplier</i> , for the purposes of this document, is <i>The Supplier</i> , Subcontractor, Consultant or Designer referred to within the Subcontract, Consultancy Agreement or Design Agreement
HSESQ	<i>Health, Safety, Environment Sustainability Quality</i>

Issue No	Description of Revision	Date
1	New UK document	10/01/2018
1.1	Section 26.2 Suction Excavators has been added	13/03/2018
1.2	Subcontractor added to definition of Supplier	07/10/2019

1. PURPOSE

- 1.1. *The Company* is committed to delivering high standards of Health, Safety, Environment, Sustainability and Quality (HSESQ) to its customers on all of its projects and recognises the contribution of its Suppliers in supporting and delivering this objective. This document is designed to promote a positive and responsible attitude towards HSESQ issues. It is not intended to be exhaustive, but must be considered the minimum standard acceptable to *The Company* on projects, or areas under its control. *The Company* HSESQ policies are included in appendices and form part of these conditions.
- 1.2. *The Supplier* must bring the content of this document and Policies to the attention of all personnel employed or under their control on *Company* projects and ensure they are actively complied with.

2. APPLICATION

- 2.1. The “Supplier Health, Safety, Environmental, Sustainability and Quality Conditions” are mandatory on all *Company* projects. *The Supplier* must comply with these conditions when undertaking work on behalf of *The Company*. Failure to do so may result in the termination of the subcontract.
- 2.2. The contents of this document are in line with statutory duties. Where *The Company* have imposed conditions which may appear more stringent than those implied by statute, these conditions take precedent. This document must therefore be recognised as a condition of contract.
- 2.3. *The Supplier* must comply with *The Company*’s “best practice” mission, safety stand downs, initiatives and procedures. This is inclusive of the Zero Harm Initiative. In this respect, *The Supplier* is deemed to have made due allowance for all relevant time, cost and resources to achieve compliance.
- 2.4. *The Supplier* will comply with all *Company* Policies as detailed within the subcontract agreement.
- 2.5. *The Supplier* will comply with *The Company*’s Plant and Equipment Specification Sheets (Plant Standards), which are available to download at: <http://www.balfourbeatty.com/suppliers/important-documents-for-suppliers/>

3. HEALTH, SAFETY AND ENVIRONMENTAL LEGISLATION

- 3.1. *The Supplier* has a statutory obligation to conduct their undertakings in compliance with relevant United Kingdom and the Republic of Ireland legislation. *The Supplier* must further ensure that all works are carried out in accordance with relevant Codes of Practice and Guidance issued by health, safety and environmental regulatory authorities.
- 3.2. This document cannot alter *The Supplier*’s statutory obligations and it is not the purpose of this document to repeat legislative requirements. However it must be noted that it is a condition of contract that those statutory obligations are fulfilled.
- 3.3. All statutory registers, notices and certificates applicable to *The Supplier*’s site activity must be maintained and be readily available for inspection by *The Company*.

4. CONTRACT AWARD

- 4.1. On contract award, and prior to commencing on site, *The Supplier* (including the site management team) will attend a start-up meeting where HSESQ arrangements will be confirmed, in detail.

Competence, duties and responsibilities must be defined and resolved prior to contract award, usually via a pre – award meeting. Minutes of this meeting will be recorded and to be included as a document within the subcontract documentation.

5. MANAGEMENT AND SUPERVISION

- 5.1. CITB's SMSTS qualification or company accepted equivalent* is a mandatory training requirement for anyone who authorises/appraises a safe system of work on a Company project. This role may, with the prior agreement of the Site Lead, be fulfilled by *The Company* Personnel.
- 5.2. SSSTS or company accepted equivalent* is the minimum accepted training requirement for anyone who 'puts people to work' and/or who supervises a safe system of work. This includes a working supervisor/ganger/charge-hand that is responsible for ensuring the safe system of work is maintained following commencement of the works. This is a mandatory requirement for our Supplier.

* *The Company* accepts a restricted number of qualifications as equivalent to the one shown. Please refer to Table 1 for more details.

Table 1

Company Accepted equivalents to SMSTS	Company Accepted equivalents to SSSTS
NEBOSH CONSTRUCTION CERTIFICATE **	IOSH SUPERVISING SAFELY**
IOSH MANAGING SAFELY**	FPS PILING SPECIALISTS SUPERVISOR TRAINING
CISRS MANAGEMENT AND SUPERVISORY CARD	CCDO DEMOLITION SUPERVISOR COURSE AND ASSESSMENT
CCDO DEMOLITION MANAGERS COURSE AND ASSESSMENT	CONSTRUCTION SKILLS REGISTER (CSR) SITE SAFETY SUPERVISORS COURSE

** Please see TRAINING AND COMPETENCE section for more information about training with no fixed expiry date.

- 5.3. *The Supplier* must identify within their Method Statement/WPP the full details of the names, number, competencies and experience levels of all designers, supervisors and managers.
- 5.4. *The Supplier's* intended management structure will be included within the subcontract documentation.
- 5.5. Details are required of certification and training achievement to recognised standards with particular reference to the ability to demonstrate competence to manage HSESQ issues within the scope of the package.
- 5.6. Where *The Supplier* is awarded a contract, it may be that for the sake of effective HSESQ management they will become responsible for the co-ordination of supervision and work within a portion of the project or required to co-ordinate a specific aspect of HSESQ on behalf of the project during their works. This must be detailed in the Terms and Conditions of the contract agreement.
- 5.7. Where required to do so this will be identified to *The Supplier* during the tender process and competent staff must be provided to discharge these responsibilities.

6. CONSULTATION AND COMMUNICATION

- 6.1. Suppliers are required to comply with and make their employees aware of *The Company* HSESQ Consultation arrangements which operate on all *Company* projects.
- 6.2. All Suppliers will receive details of project specific risks and other relevant Health, Safety, Environmental, Quality and Sustainability information in the form of a current Project Management Plan (PMP) within their subcontract order. The PMP will contain the Construction Phase Plan etc. as appendices.
These will be regularly reviewed and updated and it along with appendices will be readily available to all interested internal and external parties.
- 6.3. Everyone will receive a project specific induction.
- 6.4. Representatives for employee safety will be appointed and consulted with.
- 6.5. Health and safety will be discussed as the first item at ALL operational meetings.
- 6.6. Supervisors and managers from *The Company* and Supplier, assisted by their respective advisors will conduct HSESQ inspections, briefings, awareness sessions and weekly tool box talks.
- 6.7. Everyone must receive a Daily Activity Briefing at the start of each working shift.
- 6.8. Everyone will receive a task specific briefing on the planned safe system of work.
- 6.9. We have an open door policy and everyone is encouraged to discuss in confidence any HSESQ concerns with the management team.
- 6.10. HSESQ concerns may also be raised anonymously using *The Company's* observation cards.
- 6.11. Everyone is also able to discuss Health, Safety, Environmental, Quality and Sustainability concerns by emailing HSE@balfourbeatty.com.

7. SENIOR MANAGEMENT ENGAGEMENT

- 7.1. Supplier management will be expected to either undertake Senior Managers Tours or accompany *The Company's* Senior Managers on their tours to demonstrate leadership and reinforce and recognise good performance and visibly support safety initiatives.
- 7.2. Supplier management are also expected to attend HSESQ planning and coordination meetings and events.

8. HEALTH AND SAFETY ADVICE

- 8.1. *The Supplier* must have access to competent health and safety advice, either in-house, or from a consultant. *The Supplier's* nominated advisor must be a member of an appropriate professional body with evidence of their competency and contact details provided to the Site Lead prior to commencement on site.
- 8.2. *The Supplier's* advisor is required to thoroughly inspect their works (fortnightly, dependant on risk) and leave a detailed report with the Site Lead. This must identify any noteworthy efforts, non-compliances or areas of concern along with recommendations for remedial action. In addition, the advisor will support any briefings or toolbox talks that are necessary and this must be noted in his report.
- 8.3. *The Supplier's* management is responsible for immediately implementing the safety advisor's recommendations and formally confirming satisfactory close out to the Site Lead in writing within 14 days of close out.

9. SETTING PEOPLE TO WORK SAFELY

- 9.1. *The Company* uses different approaches to risk assessment, method statement/WPP and briefings. The approach taken by the project will be described in the Construction Phase Plan supplied by the project. However, *The Supplier* must be aware at the time of tender that they must comply with the approach chosen by the project. The minimum requirements for a Method Statements / WPP are contained within APPENDIX 1.
- 9.2. Risk Assessments, Method Statements/WPP (RAMS) and briefings must be prepared by *The Supplier* in line with their own internal procedures and legal requirements and submitted to *The Company* for appraisal.
- 9.3. Where *The Supplier* has no internal system for producing Risk Assessments, Method Statements / WPP (RAMS), they will either be required to work to *The Company's* Safe Systems of Work or will be provided with the 'Setting People to Work Safely' procedure and the templates for their use along with sufficient training and instruction.
- 9.4. *The Suppliers* Risk Assessments, Method Statements/WPP (RAMS) and briefings must be provided to *The Company* for appraisal. Sufficient time must be provided and allowed within the programme/schedule of work for this to occur before the activity is planned to start. The amount of time must be agreed as part of a pre-start meeting with *The Supplier*, which must be a minimum of 2 weeks if possible. If the appraisal determines that the safe system of work is not suitable or sufficient it must be revised and re-submitted prior to work commencing.
- 9.5. Supplier Supervisors must brief their own employees and anyone working on their behalf. A copy of the briefing and attendance record must be provided to *The Company*.
- 9.6. Risks should be eliminated or reduced to the lowest reasonably practicable level. The list below sets out the hierarchy of control to be followed when planning to reduce risks:
 - **Elimination.** Redesign the job or substitute a substance so that the hazard is removed or eliminated
 - **Substitution.** Replace the material or process with a less hazardous one
 - **Engineering controls.** For example, use work equipment or other measures to prevent falls where you cannot avoid working at height, install or use additional machinery to control risks from dust or fume or separate the hazard from operators by methods such as enclosing or guarding dangerous items of machinery/equipment. Give priority to measures which protect collectively over individual measures
 - **Administrative Controls.** These are all about identifying and implementing the procedures you need to work safely. For example: reducing the time workers are exposed to hazards (e.g. by job rotation); prohibiting use of mobile phones in hazardous areas; increasing safety signage, and performing risk assessments
 - **Personal protective equipment** in addition to the minimum Company standard must only be provided after the need for such equipment has been identified via a risk assessment and all the above controls have been considered
- 9.7. All activities must be subject to a formal, documented, project specific risk assessment to determine the appropriate Health, Safety and Environmental controls for any operation.
- 9.8. The risk assessment must address hazards to anyone who may be affected by the operation in addition to those who are engaged in the operation.
- 9.9. When carrying out a risk assessment, consideration must be given to relevant aspects of the task which could present a hazard. This must include but not be limited to the following:
 - Company fatal risks

- Occupational health risks
 - Environmental risks
 - Human factors including skills, knowledge and experience
 - Selection of products, plant, and equipment
 - Any specific customer requirements or standards
 - Environmental factors i.e. terrain, weather, location
 - Members of the public
- 9.10. *The Supplier's* Method Statement/WPP must provide a sufficiently detailed and task / environment specific sequence of work including logistics, movement of plant, management of deliveries and distribution/removal of materials to demonstrate that the work has been adequately planned.
- 9.11. *The Supplier's* Method Statement/WPP must contain details of supervision to be provided and those who are appointed into specific health and safety duties.
- 9.12. Where applicable, the Method Statement/WPP must include a scale drawing or sketch showing the extent of the work space, the location of delivery lorry / plant and vehicle access points and suitably sized holding areas. Physical space for plant and vehicle operations and interfaces must be considered for every specific location and required operations at that location.
- 9.13. All Supplier Supervisors must be fully briefed and be issued with a copy of their Method Statement/WPP and Briefing documentation by their employer for works for which they are responsible for supervising. They must also be briefed and issued with other associated documentation (such as the PVPMP, Lift Plan, Permits etc.) by *The Company*.
- 9.14. Supplier Method Statement/WPP and associated Risk Assessments must be reviewed:
- If it is no longer valid
 - If there has been a significant change
 - When introducing new equipment, substances, procedures and technology
 - Following an accident, incident or case of work related ill health
 - A minimum of once every 2 years for model or 'generic' risk assessments and 8 weeks for site specific risk assessments
- 9.15. Risk assessments and Method Statement/WPP must be continuously reviewed and updated as circumstances change and operatives re-briefed on any changes.
- 9.16. To ensure that a level of awareness and competence is maintained *The Company's* Site Lead will decide how often briefings must be delivered based on the level of risk and complexity of the task. The frequency of briefings will be documented within the Construction Phase Plan.
- 9.17. All operatives must receive a Task Briefing from their supervisor at intervals not exceeding the frequency described in the Construction Phase Plan (or less if circumstance change) which will advise them of:-
- Duty Holders (e.g. Supervisor, Site Lead, First Aider, Confined Space Top-man / Top-person, Emergency Services etc.)
 - Permits required
 - Resources required
 - Emergency arrangements specific to the task

- Instructions on what to do if work conditions or work methods change unexpectedly
- 9.18. Any control measures that are related to a Company 'Fatal Risk' must be emphasised in the Task Briefing Sheet/Point of Work Assessment.
- 9.19. To ensure that a level of awareness and competence is maintained, *The Company's* Site Lead will decide how often briefings must be delivered based on the level of risk and complexity of the task. The frequency of briefings will be documented within the Construction Phase Plan.
- 9.20. Workforce briefings must contain only the information pertinent to the individuals carrying out the task. The Workforce briefing must comprehensively cover all relevant hazards and significant residual risks and must be in a format which is easily explained to the operatives through a series of task briefings. Workforce briefings must not contain any information that is not in the Method Statement/Work Package Plan.
- 9.21. A record of such briefings uniquely referenced to each Method Statement/WPP must be maintained by *The Supplier* and made available to *The Company* on request.
- 9.22. *The Supplier* must appoint a responsible person to identify all hazardous substances, which they are likely to import onto site, or are liable to produce/create on site. COSHH assessments must be carried out for all of these substances and briefed to the site teams. A copy of these assessments given to the Site Lead. Note: Hazard data sheets are not acceptable as a COSHH Assessment.
- 10. SUB-SUBCONTRACTING**
- 10.1. Where a package of works includes for the provision of a 2nd tier Supplier, or *the Supplier* wishes to sub-let part of his work, written agreement prior to any contract award must be obtained from *The Company*.
- 10.2. The 2nd tier Supplier must be assessed to ensure they are competent and have adequate resources to complete the work. The assessment of any 2nd tier Supplier used for sub-let work must be at least to the standard of *The Company* HSE assessment. A copy of this assessment must be forwarded to *The Company* within an agreed time period for review and approval.
- 10.3. *The Supplier* is required to include, and will be deemed to have included, copies of *The Company's* "Supplier Health, Safety, Environmental, Quality and Sustainability Conditions" in any subcontract that they may award and to make compliance with this document a condition of any such subcontract. Evidence of such must be provided to *The Company* when requested or as required by the Subcontract.
- 11. HSE INCIDENT REPORTING**
- 11.1. *The Supplier* has a duty to report accidents/incidents to *The Company* representative and enforcing authority in exactly the same way as *The Company*.
- 11.2. Supply Chain incidents must be investigated, reported and reviewed in an identical manner to those of Company employees.
- 11.3. A copy of Supply Chain's regulatory authority report forms must be received and attached to the relevant Investigation report.
- 11.4. All incidents that result in injury or harm to the environment, including near misses, must be reported to *The Company* Site Lead / Facility Manager immediately and the details of the incident/injury recorded on an Incident Report Form held by the Site Lead / Facility Manager. Incidents/injuries must be investigated by *The Supplier* and action taken to prevent a re-occurrence.
- 11.5. Where incidents are reportable under Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR), a copy of the statutory report must be provided to the Site Lead / Facility Manager/HSES Lead.

- 11.6. *Suppliers* who conduct internal investigations must provide copies of their report to the Site Lead / Facility Manager/HSES Lead within a reasonable timescale and co-operate fully in any investigation conducted by *The Company*. *The Company* requires initial investigation details for all accidents within 24 hours.

12. OCCUPATIONAL HEALTH

- 12.1. *The Supplier* shall identify all occupational health hazards associated with their works and evaluate the risk posed.
- 12.2. *The Supplier* shall identify workers performing tasks that require exposure monitoring and health surveillance and ensure that it is provided meeting at least the minimum legal requirements. ([See HSE website on Health Surveillance requirements](#))
- 12.3. *The Supplier* shall ensure that their employees are fit for work.
- 12.4. Supplier employees shall advise the Site Lead of any issues related to their fitness that might impact on their ability to perform their work activities.
- 12.5. All suppliers must ensure that the relevant management of health information and associated documentation is available to *The Company* upon request (i.e. HAVS, Fitness for Task Certificate, evidence of appropriate health surveillance programme).

13. ALCOHOL AND DRUGS

- 13.1. *The Company* strictly prohibits:
- Being in possession of un-prescribed controlled drugs or substances intended for abuse at work
 - Consumption of alcohol, un-prescribed controlled drugs, psychoactive substances or substance abuse at work
 - Trade in or supply of alcohol, controlled drugs, psychoactive substances or permitting their presence or use by others at work
 - Reporting for work while over the legally permitted blood or breath alcohol limit for driving (irrespective of whether the individual drives in the course of their work) or any lower limits that apply to our people as set out in Appendix A
 - Reporting for work having consumed un-prescribed controlled drugs, psychoactive substances or engaged in substance abuse, to the extent that such substances or their metabolites would be present in the body, and would be revealed as a positive result under a drug test
 - Reporting for work having taken prescribed or over the counter drugs which may have side-effects that affect an individual's ability to work safely, without informing their manager
 - Driving of Company vehicles, including those available for private use, at any time while under the influence of drugs or other substances, or while over the legally permitted blood or breath alcohol limit
- 13.2. Drug and Alcohol testing may be undertaken on any project or at any premises under its control as part of:
- *The Company's* Induction Procedure, or
 - a random programme to discourage individuals being under the influence of drugs or alcohol at work, or
 - where there are reasonable grounds to suspect individuals may be under the influence of drugs or alcohol or following an incident

- 13.3. Anyone suspected of being under the influence of alcohol or drugs will be removed from the workplace and *The Supplier* must ensure that the individual(s) remains on site and available for testing. Failure to remain on site for testing will invoke immediate disciplinary procedures.
- 13.4. Where a project is covered by the Transport and Works Act *The Supplier* must make themselves familiar with their statutory duties and they must be aware that specific organisations such as Network Rail have a mandatory policy of screening for alcohol and drugs through routine and random testing.
- 13.5. When requiring any medication *The Supplier's* employee must find out if there may be a side effect likely to impair their work performance and safety from the drug or any medication concerned whether prescribed or available without prescription and advise the Site Lead.
- 14. NON COMPLIANCE PROCEDURE**
- 14.1. *The Company* takes its rules and standards very seriously, and any breach by *The Supplier* or their employees will result in a relevant level of corrective action being taken. This corrective action could include a formal review of *The Suppliers* HSESQ performance and contract agreement.
- 14.2. *The Company* will always look to system and root cause failures in all incidents, but where a breach is wilful it will be dealt with appropriately.
- 14.3. All employees of *The Supplier* need to be aware that following a breach of an HSE rule or standard they may be subject to immediate corrective action which may include being excluded from site.
- 14.4. Corrective action will not be taken as immediate reaction to an incident, but will follow a thorough investigation. Whilst the investigation is completed however, an individual may be suspended from working for *The Company*.
- 15. EMERGENCY PROCEDURES**
- 15.1. *The Company's* Site Lead will establish a set of emergency arrangements for accidents, fire, gas leaks, environmental pollution, summoning the emergency services and evacuation, etc.
- 15.2. These arrangements will be briefed during induction and will be displayed on site. *The Supplier* must ensure that everyone under their control is informed of the emergency procedures applicable to the site or facility.
- 15.3. *The Supplier* must detail their own emergency arrangements within the Method Statement/WPP, for their specific operation or activities, e.g. use of MEWPs, confined spaces, etc. These arrangements will be tested on a regular basis and *The Supplier* must ensure that everyone under their control participates in the tests/drills.
- 16. ENTRY INTO PREMISES OR ONTO SITE**
- 16.1. On initial arrival, or after an extended period away from site, *The Suppliers* employees must report to the Site Lead or his designated representative and receive an induction before entering site or commencing work. Evidence of appropriate skills will be required and be presented to *The Company*, prior to authority being given to access the workplace.
- 16.2. *The Suppliers* employees must only access workplace using authorised and designated access points.
- 17. LONE WORKING**
- 17.1. Lone working must only be carried out following approval from *The Company* and once other options for eliminating lone working have been explored and dismissed, or if having more than one person undertaking the work increases the risk to the health and safety of the individuals involved.
- 17.2. Lone working must not be permitted for the following activities:
- Working in a confined space

- Activities requiring someone dedicated to a rescue role
 - Working at or near exposed live electricity conductors
 - Diving operations
 - Vehicles carrying explosives
 - Fumigation work
 - Work near water
 - Work at height (i.e. MEWP operation)
 - Working in an excavation
 - Working on live gas pipes
- 17.3. Other activities may exist that are considered too difficult or dangerous to be carried out by an unaccompanied worker. This must be determined by a risk assessment.
- 17.4. Where a Suppliers employee is new to a job, undergoing training, performing a job that presents specific risks, or dealing with new situations, they must be accompanied until considered competent to carry out tasks alone.
- 17.5. Lone workers must be sufficiently experienced and fully understand the risks and precautions involved in their work and the locations they are scheduled to work in.
- 17.6. Training appropriate to the role must also be given to enable employees to cope with:
- Unexpected circumstances
 - Potential exposure to violence and aggression
 - Personal safety
 - Conflict resolution or defusing techniques
 - Summoning help
 - Reporting Incidents
 - Emergency situations, such as first aid or fire
- 17.7. The level of training must be based upon the level of risk to the Lone Worker.
- 17.8. *The Supplier* must implement a safe system of work to monitor lone workers, as effective means of communication are essential. *The Supplier* may be required to use a system already established on the project, if so this will be detailed within the Construction Phase Plan.
- 17.9. The supervisor must also check and verify that communication devices are working effectively prior to commencing each lone working activity.
- 17.10. All weekend or night time working must be agreed by prior arrangement with *The Company Site Lead*. Specific safe systems of work must be in place and competent supervision shall be in attendance at all times during the work activity.

18. FIRE PREVENTION

18.1. Competence

- 18.1.1. **Responsible Person for Fire Safety** and their deputies on projects must hold a Site Managers Safety Training Scheme (or Company accepted equivalent Table 1) Facilities Managers who are the Responsible Person for Fire Safety must have IOSH Managing Safely (or Company accepted equivalent Table 1), have sufficient status and authority for the effective execution of their duties, and be afforded time to undertaken their duties by the Site/Project/Office/Facility Lead.
- 18.1.2. **Fire Marshal(s)** must have successfully completed a Fire Marshal training course (including practical fire extinguisher training) and have sufficient status and authority for the effective execution of their duties and responsibilities.
- 18.1.3. **Hot Works Responsible Person(s)** holds a minimum Site Supervisor Safety Training Scheme (SSSTS) (or Company accepted equivalent Table 1), Gas Safe Registered (if applicable) and practical fire extinguisher training.
- 18.1.4. Fire Risk Assessors
- 18.1.5. In accordance with the Fire Risk Assessment Competency Council [guide](#) to choosing a competent Fire Risk Assessor the following apply:
- 18.1.6. **Simple or Low risk premises –**
- The Responsible Person for Fire Safety may for fill this role, with support from the HSE Advisor, and
 - suitable experience and knowledge of the type of activity to be undertaken
- 18.1.7. **Complex risk premises –**
- Independent registration with, or certification from, a professional or certification body and that meet the competency criteria established by the Fire Risk Assessment Competency Council (see Table 2)
 - Experience of undertaking fire risk assessments for your kind of business and premises
 - References from previous clients in premises of your type

18.1.8. Table 2

Register holders	UKAS Accredited Company Certification Scheme	UKAS Accredited Person Certification Scheme	Professional Body Person Registration Scheme
The BAFE 'SP205' company scheme is delivered by the following UKAS accredited certification bodies:- ECA/(ELECSEA) , NSI , SSAIB	✓		
IFC Certification Ltd operate the 'IFCC 0099' company scheme	✓		
Institute of Fire Prevention Officers (IFPO) This is a professional body registration scheme			✓
Institute of Fire Safety Managers (IFSM) This is a professional body registration scheme			✓
Institution of Fire Engineers (IFE) This is a professional body registration scheme			✓
Register of Skilled Persons (ROSP). The ROS Group - operate a 'Fire Lead Assessor Management Evaluator' Scheme 'FLAME'		✓	
Warrington Certification Ltd operate a 'Fire Risk Assessors Certification Scheme (Individuals) FRACS'		✓	
Warrington Certification Ltd operate a 'Fire Risk Assessors Certification Scheme (Company) FRACS'	✓		

18.2. Prohibitions

- Hand bells and klaxons are prohibited for use as fire alarms
- Deliberate burning of material is prohibited on all Projects/Offices/Depots and Factories
- Storage of fuel in plastic containers is prohibited
- Jubilee clips are prohibited for connecting flexible gas supply hoses
- Storage of gas and flammable liquids inside, under and on buildings is prohibited
- Portable Halogen lamps are prohibited
- Smoking is prohibited except in designated areas
- The use of compressed gas welding equipment without flash back arrestors is prohibited
- Storage of additional or unnecessary cylinders (including empty) at the workplace is prohibited
- The use of LPG as a fuel at an office or welfare facility (excluding caravans) is prohibited
- No combustible liquids (petrol/diesel etc.) or gas cylinders are permitted within 6m of the hot work operation

18.3. Requirements

- 18.3.1. In addition to complying with the Fire Precautions (Workplace) Regulations, it is also a requirement that *the Supplier* comply with The Joint Code of Practice titled "Fire Prevention on Construction Sites".

- 18.3.2. *The Company* applies and enforces the Code of Practice therefore Suppliers must make suitable provision within their tender.
- 18.3.3. Where flexible protective covering materials are used, these must conform to the requirements of the Loss Prevention Standard LPS 1207: Fire Requirements for the LPCB Approval and Listing of Protective Covering Materials or equivalent standard. The materials shall be manufactured in accordance with a quality assurance and certification programme and the manufacturer shall be certified by a third-party approval body accredited by the United Kingdom Accreditation Service. The relevant approval mark shall be printed on the material.
- 18.3.4. When flexible materials, including decorative films are used to clad scaffolding or temporary/permanent steel work these materials must conform to the requirements of LPS 1215: Requirements for the LPCB Approval and Listing of Scaffold Cladding Materials equivalent standard (for example, ref. 16). The material shall be manufactured in accordance with a quality assurance and certification programme, and the manufacturer shall be certified by a third-party approval body accredited by the United Kingdom Accreditation Service. The relevant approval mark shall be printed on the material.
- 18.4. Hot Works
- 18.4.1. Hot Work Permits must be applied where heat, sparks or flames may be generated. The Permit must be raised and closed by the Hot Works Responsible Person.
- 18.4.2. *The Company* will appoint a Hot Works Responsible Person to issue Hot Work Permits and ensure the requirements of the Permit are periodically monitored.
- 18.4.3. Hot Work Permits are not required where an area is specifically designed for this purpose, for example factory welding workshops.
- 18.4.4. Any combustible material within 6m of the operation that cannot be moved must be protected from sources of ignition
- 18.4.5. Fire extinguishers must be present at all times during the hot work operation. The type of fire extinguisher will be detailed in risk assessment for the task being completed.
- 18.4.6. In the event of a metal spill when using an Aluminothermic Welding process, Water or AFFF Extinguishers must not be used; the flow of molten steel or slag will be contained using sand and sand trays.
- 18.4.7. Any area of hot work must be actively monitored for at least one hour after completion of the operation, to confirm that there is no form of ignition. This will mean hot work cannot be carried out near the end of the day (within at least 1.5 hours of the time the site will be vacated).

19. FIRST AID

- 19.1. Competence
- First Aid training must be provided by a Company recognised body (e.g. St Johns Ambulance, British Red Cross or St Andrews Ambulance).
 - Appointed Person (First Aid) first aid training must be provided by a Company recognised body (e.g. St Johns Ambulance, British Red Cross or St Andrews Ambulance). Such training is usually of one day duration. A certificate of qualification will be issued on the successful completion of training. Refresher training must be attended to maintain the qualification within the stipulated timescale.

19.2. Requirements

- 19.2.1. First aid facilities will be provided under the control of a First Aider or appointed person at every site. Suppliers will be expected to assess their first aid needs and provide a number of first aiders and provisions appropriate to their manpower and nature of their works to support the common arrangements of the project. First aider names and location must be prominently displayed on the site notice board for fixed project sites.
- 19.2.2. The common arrangements will be confirmed to Supplier by completion of the 'Supply Chain Quality, Safety and Environmental Summary' prior to finalising the subcontract.
- 19.2.3. The first aid kit contents must be determined by the findings of the Assessment of First Aid Needs however, it must include the following as a minimum for low risk workplaces:
- a leaflet providing general guidance on first aid (for example, HSE's leaflet Basic advice on first aid at work)
 - individually wrapped sterile plasters (assorted sizes), appropriate to the type of work (hypoallergenic plasters can be provided if necessary)
 - sterile eye pads
 - individually wrapped triangular bandages, preferably sterile
 - safety pins
 - large sterile individually wrapped un-medicated wound dressings
 - medium-sized sterile individually wrapped un-medicated wound dressings
 - individually wrapped moist cleansing wipes
 - at least one litre of sterile water or sterile normal saline (0.9% w/v) in sealed, disposable containers for eye irrigation
 - disposable gloves

20. **LIFTING OPERATIONS**

20.1. Competence

- 20.1.1. **Appointed Person** - Competent and holds a valid CPCS or NPORS(CSCS) Appointed Person qualification, except for lorry loaders where an ALLMI Appointed Person qualification is acceptable.
- 20.1.2. **Crane/Lift Supervisor** - Competent and holds a valid CPCS or NPORS(CSCS) Crane/Lift Supervisor qualification except for lorry loaders where an ALLMI Crane Supervisor qualification is acceptable.
- 20.1.3. **Slinger / Signaller** - Competent and holds a valid CPCS or NPORS(CSCS) Slinger/Signaller qualification except for Lorry Loaders where an ALLMI Slinger/Signaller qualification is acceptable
- 20.1.4. **Crane Co-coordinator** - Holds a valid CPCS or NPORS(CSCS) Crane/Lift Supervisor qualification with previous experience of the role in similar circumstances.
- 20.1.5. **Crane Operator** - Competent and holds a valid CPCS or NPORS(CSCS) qualification for the type of equipment except for Lorry Loaders where an ALLMI card is acceptable.
- 20.1.6. **Overhead Travelling Crane Operator** - Competent and holds a valid CPCS or NPORS(CSCS) (All Types) qualification, or for overhead travelling cranes in factories and depots RTITB is also accepted.
- 20.1.7. **Excavator Operators** - Competent and holds a valid CPCS or NPORS(CSCS) card for the category of excavator they are operating and lifting duties if undertaken.

- 20.1.8. **Piling Rig Operators** - Competent and holds a valid CPCS card for the category of rig they are operating.
- 20.1.9. **Telehandler Operator** - Competent and holds a valid CPCS Telescopic Handler or NPORS(CSCS) card for the category of Telehandler being operated.
For suspended loads additional training is required from CPCS or NPORS(CSCS)
- 20.1.10. **Lift Truck Operator** - Competent and holds a valid CPCS or NPORS(CSCS) card for the category of lift truck they are operating. RTITB cards are acceptable only during factory operations.
For suspended loads additional training is required from CPCS, NPORS(CSCS) or RTITB.
- 20.1.11. **Hoist Erector** NVQ levels two or three in Hoist Installation.
- 20.1.12. **Hoist Operator** over 18 and has undertaken training by the hoist supplier and holds a valid CPCS A20 Category card.
- 20.1.13. **Static Lifting Equipment Operator** - Has undertaken familiarisation training for the static lifting equipment.
- 20.1.14. For projects on Network Rail and London Underground Rail Infrastructures, the above qualifications are replaced by the Sentinel competence.
- 20.1.15. For Basic Lifts only, an individual can undertake more than one of the duties above where they have the required competency.
- 20.2. Requirements
 - 20.2.1. Forks fitted to or suspended from 360 excavators and the backhoe of 180 excavators must not be used for lifting operations.
 - 20.2.2. The lifting of personnel may only be undertaken using excavators, telehandlers, lift trucks or lorry loaders providing they conform to the requirements of EN280 Mobile Elevated Work Platforms including having integrated man riding basket controls.
 - 20.2.3. Gin wheels must be inspected and used in accordance with all statutory regulations, guidance notes and the Manufacturer's Operating Instructions. Gin wheels used on scaffolding or as part of a permanent system must only be used with an automatic brake fitted.
 - 20.2.4. The Crane/Lift Supervisor must monitor the effectiveness of the safe system of work, identify any changes in circumstances and if necessary, stop the lift and seek further direction from the Appointed Person.
 - 20.2.5. Cranes must not be supplied with a free fall facility unless required for the specific circumstances. Cranes supplied with a free fall facility must be fitted with interlocks that operate in a positive and fail-safe manner.
 - 20.2.6. The use of swivel-arm hoists are prohibited.
 - 20.2.7. Glass lifting accessories must not be controlled by radio operation.
 - 20.2.8. A Slinger/Signaller is required for all lifting operations where lifting accessories are being used; the only exception to this is non-crane lifts using attachments such as hydraulically operated material handlers and proprietary mechanical and vacuum grab systems.
 - 20.2.9. **Basic lifts:** A Crane/Lift Supervisor: Attendance is not required on site at all times, but must ensure all plans and competencies are in place and be immediately available.
 - 20.2.10. **Intermediate and Complex lifts:** A Crane/Lift Supervisor must be present for the duration of the lifting operation.

20.2.11. **WHILST WORKING ON NETWORK RAIL AND LONDON UNDERGROUND RAIL INFRASTRUCTURES**

The Sentinel Crane Controller must be present for the duration of all lifting operations on the rail infrastructure.

20.2.12. External crane suppliers must ensure that their employed Operators are subject to medical surveillance and are fit for the task.

20.2.13. Lifting operations with the bucket attached to the excavator is prohibited.

20.2.14. The slinger/signaller is prohibited from acting as the crane operator, except in the case of lorry loader lifting.

20.3. Zero Tolerance Rule

20.3.1. Any plant used for lifting operations overturning will be classified as a High Potential Incident (HiPo) and following investigation, anybody found to have violated a safe system of work or safety management procedure, which has or could have compromised an lifting equipment's stability, will be removed from site.

Anyone removed from site will not be permitted to return to site without the approval of the SBU Director and the HSES Lead. In the case of *The Company* employees, a violation will be deemed as gross misconduct and disciplinary action may result in dismissal.

20.3.2. Examples of violation

- Undertaking, supervising, permitting or instructing a lifting operation without a fully authorised or briefed Lift Plan
- Knowingly violating a safe system of work (Lift Plan, RAMS, permit, etc.)
- Knowingly operating or permitting the operation of a piling rig on a piling platform without an approved Working Platform Certificate
- Operating an excavator or other tracked plant without authorisation or the correct and valid competency
- Recklessly operating lifting equipment's which could affect its stability
- Disabling, removing or tampering with load or stability indicators

20.4. General

20.4.1. *The Supplier* must consult with *The Company* Site Lead before commencing lifting operations on site.

20.4.2. All lifting operations must be carried out in accordance with 'Lifting Operations: Our Expectations' document ([HSF-RM-0039a](http://www.balfourbeatty.com/suppliers/important-documents-for-suppliers/)), which is available to download at:
<http://www.balfourbeatty.com/suppliers/important-documents-for-suppliers/>

20.4.3. A competent Lifting Operations Appointed Person must be nominated to plan lifting operations on site. This person will be provided by *The Supplier*, unless otherwise agreed. Documented evidence of competence will be required. A Lift Plan must be provided for appraisal for each lift. The Crane/Lift Supervisor must brief those involved on the contents of the Lift Plan, and be present on site during the lift as follows:

Basic lifts: A Crane/Lift Supervisor: Attendance is not required on site at all times, but must ensure all plans and competencies are in place and be immediately available.

Intermediate and Complex lifts: A Crane/Lift Supervisor must be present for the duration of the lifting operation.

20.4.4. Key personnel must be appointed for lifting duties i.e. Crane/Lift Supervisor, crane operator and slinger /signaller. These persons must be trained and competent to carry out their duties.

- 20.4.5. Physical Plant Exclusion zones must be established around operational mobile plant and vehicles. This must have some form of physical barrier in place. Actual zones will be dependent on the plant/vehicle and any physical restrictions such as the proximity of fixed or temporary structures. The details of the zones must be identified in the Method Statement/WPP or other briefing document as appropriate and all of the work teams been briefed on the use of exclusion zones and the safe system of work required for entry.
- 20.4.6. For exceptional tasks mitigated through robust safe systems of work, that require workers to enter zones, for example, kerb laying, disconnecting attachments, slinging loads, off-loading materials from fork lift trucks or lorry beds, a safe system of work must be in place. The safe system must be site specific and activities must be conducted with clear communication between the plant operator or vehicle driver and workers performing the task.
- 20.4.7. The Appointed Person must establish the category which best reflects the complexity of the lift following reference to the relevant part of BS7121. The category of the lift determines the documentation required.
- 20.4.8. BS7121 Series has been accepted as representing the consensus of practical experience for safety on cranes. The following parts of BS7121 details complexity indexes and considerations with the specific crane types:
- BS7121-3 Code of Practice for Safe Use of Cranes. Mobile Cranes
 - BS7121-4 Code of Practice for Safe Use of Cranes. Lorry Loaders
 - BS7121-5 Code of Practice for Safe Use of Cranes. Tower Cranes
 - BS7121-11 Code of Practice for Safe Use of Cranes. Offshore Cranes
 - BS7121-12 Code of Practice for Safe Use of Cranes. Recovery Vehicles and Equipment
 - BS7121-13 Code of Practice for Safe Use of Cranes. Hydraulic Gantry Lifting Systems
 - BS7121-14 Code of Practice for Safe Use of Cranes. Side Boom Pipelayers
- All other types of lifting equipment not featured above, must use BS7121-1: 2016
- 20.4.9. A tagging/colour marking system to give a visual indication that the lifting accessory has been thoroughly examined within the last 6 months must be applied, and recorded evidence available on site.
- 20.4.10. Supply chain lifting accessories must have a unique tagging/colour marking system of identification or comply with the above requirements.
- 20.4.11. Lifting accessories used to offload deliveries and which are immediately removed by *The Supplier* do not require tagging or colour coding under this system; however, recorded evidence of current thorough examination must be available on site.
- 20.4.12. Assessment of ground bearing capacity and outrigger pad/haul road and pavements/piling mat design must be carried out by a competent person. The Temporary Works Coordinator, in consultation with the Appointed Person, is responsible for ensuring that there is an engineering assessment of the ground bearing capacity and a design of the outrigger pads/haul roads and pavements/piling mats. The pressures imposed on the ground must be calculated or obtained from the crane manufacturer. This must take account of all routes that may be traversed.
- 20.4.13. *The Company* requires completion of a Lifting Appliance Checklist prior to any lifting appliance commencing work. This will require all statutory certificates and registers for the lifting equipment and lifting accessories to be readily available for inspection.
- 20.4.14. External crane suppliers must ensure that their employed Operators are subject to medical surveillance and are fit for the task.

- 20.4.15. Where the crane or part of the load being lifted can enter prohibited space, such as over a public highway, adjacent to overhead lines or rail infrastructure, the crane must be fitted with zone limiting devices. The limiting devices must limit both slewing and derricking as required.
- 20.4.16. Where *The Company* hires lifting equipment from *The Supplier*, a written plan of maintenance for that equipment and any accessories must be agreed with *The Supplier*, taking account of the environment in which the equipment is used.
- 20.4.17. All lifting equipment and accessories must be inspected by a competent person weekly whilst in use and recorded. Any deterioration detected must be reported, recorded and remedied or the item quarantined.
- 20.4.18. The Plant Operator must undertake inspections in accordance with the manufacturer's instructions.
- 20.4.19. The Slinger/Signaller must visually check all lifting accessories before use on every shift.
- 20.4.20. Pre-use visual checks must be undertaken per shift on all man-riding equipment and records must be kept.
- 20.4.21. Tyre condition is critical to lifting operations where the equipment relies on tyre pressure for part or all of its weight bearing and stabilisation capacity.
- 20.5. Lifting with Excavators
- 20.6. When planning a lifting operation *The Supplier* must consider whether an excavator is the most appropriate machine for the task. *The Company* Plant standards for excavating equipment must be complied with.
- 20.7. When an excavator is being used to lift loads whilst travelling from one location to another (pick and carry duties), its rated capacity must be reduced by 50% of that stated on the duty chart, when it is cross carriage orientation.
- 20.8. A Lift Plan must be in place for all excavator lifting operations.
- 20.9. When lifting with excavators the bucket must be removed, the shackle is attached to the lifting point and is free hanging, and a swivel shackle is placed between the load and the lifting point.
- 20.10. Where a quick hitch is permanently mounted on an excavator then the thorough examination for the excavator must also cover the quick hitch. If the quick hitch is moved from one machine to another it is classed as an accessory and must be thoroughly examined every 6 months.
- 20.11. The requirement to have a Crane/Lift Supervisor on site during the lift is dependent on the category of lift (see Table 3).



Table 3

Role	Lift Category		
	Basic	Intermediate	Complex
Crane/Lift Supervisor	Attendance is not required on site at all times, but must ensure all plans and competencies are in place and be immediately available.	Must be in the location. Only directly supervises when more than one lift is taking place	Required

20.12. Lorry Loaders

20.12.1. The use of a lorry loader by *The Company* must be via one of two contractual arrangements; hire of a lorry loader or a contract lift. The supply and delivery of goods by lorry loader is a contract lift (see Table 4). Also see 'A Suppliers Guide to Lifting Procedures for Lorry Loaders' ([HSF-RM-0039d](#)) for further guidance.

20.12.2. **Table 4**

The Business Unit requiring the load to be moved	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>	
HIRED LORRY LOADER (Hired or Managed)	CONTRACT LIFT (Formally Contracted or Included with the delivery of goods)
<p>The lorry loader owner has a duty to:</p> <ul style="list-style-type: none"> provide a lorry loader that is properly maintained, tested and certified provide a competent operator (if specified) confirm to the Site Lead the size of standard spreader pads supplied with the lorry loader 	<p>The Lifting Contractor is responsible for:</p> <ul style="list-style-type: none"> supplying the Appointed Person; planning the lift, and operation of a safe system of work organisation and control of the lifting operation providing a lorry loader that is properly maintained, tested and certified providing a competent operator Ensuring stabilizer loads are adequately spread to ensure the ground bearing capacity is not exceeded

20.12.3. All deliveries must be accompanied by a Lift Plan (which may form part of a method statement/WPP) produced by an Appointed Person on behalf of *The Supplier*. This Plan may be generic but must cover the requirements for the material being offloaded.

20.12.4. The Lorry Loader Operator can only assume combined roles (Table 5) for certain categories of lift, provided they meet the required competencies. Where the Operator does not hold the competency requirements, the Appointed Person must ensure that the competencies required are met by a separate individual.

20.12.5. **Table 5**

Role	Lift Category		
	Basic	Intermediate	Complex
Appointed Person	Not required on site	Maybe required on site	Required
Crane/Lift Supervisor	Roles may be combined	Roles may be combined	Required
Operator			Required
Slinger/Signaller		Required	Required

20.13. Lifting with Telehandlers

20.13.1. Loads carried on the forks of a telehandler can be covered by a routine Lift Plan.

- 20.13.2. Telehandlers must only be used to carry suspended loads if designed to do so and if the method is included in the Manufacturers Operating Instructions. This method must be included in the Lift Plan and only proprietary attachments designed for use with the telehandler for this purpose must be used.
- 20.13.3. The Telehandler Operator can fulfil the role of Crane/Lift Supervisor for loads carried on the forks of the telehandler if they have Crane/Lift Supervisor Competencies. The Telehandler Operator is not permitted to act as the Crane/Lift Supervisor whilst carrying suspended loads.
- 20.13.4. Longitudinal Load Moment Indicators (LLMI) must not be relied upon for establishing the weight of the load.
- 20.14. Lifting with Lift Trucks
- 20.14.1. Gas powered, rigid mast forklifts must only be used on clean and dry, flat surfaces for the movement of materials within buildings or on concrete hard standing areas.
- 20.14.2. Truck mounted forklifts and other small forklifts used by delivery companies must not be used on unmade ground. Deliveries must be restricted to a suitable hard standing.
- 20.14.3. Operators can only fulfil the role of Crane/Lift Supervisor for loads carried on the forks of the lift truck if they have Crane/Lift Supervisor Competencies. When loads are suspended the Operator is not permitted to act as the Crane/Lift Supervisor.
- 20.14.4. Suspending loads from lift trucks is only permitted if the equipment is designed for this purpose and details are included in the Manufacturers Operating Instructions. This must be included within the Lift Plan and only proprietary attachments designed for this purpose must be used. The Operator must have undertaken familiarisation specific to the lifting attachment.
- 20.14.5. Longitudinal Load Moment Indicators (LLMI) must not be relied upon for establishing the weight of the load.

21. DEMOLITION

- 21.1. The varied nature and complexity of demolition is such that a specific Risk Assessment and Method Statement/WPP is required for each activity. These will be appraised using by a representative of *The Company*. The work may involve controlled collapse, mechanical demolition or hand down-taking in any location from a greenfield site to a city Centre. Careful pre-planning, implementation of control measures and robust briefing methods are required.
- 21.2. Demolition Contractors must be a current member of the National Federation of Demolition Contractors (NFDC). Evidence of membership, competency and adequacy of resources must be provided to *The Company* prior to placing an order.
- 21.3. A full time Demolition Supervisor must be employed and based on the project to oversee and manage all demolition activities on site. The Demolition Supervisor will be in attendance when work is carried out. Works must stop if the Demolition Supervisor is not in attendance. The Demolition Supervisor must hold a Gold Card Demolition Supervisor (CCDO) qualification in addition to other mandatory supervision competencies (such as Site Managers Safety Training Scheme).
- 21.4. All employees and Supplier involved in Demolition works must have a Certificate of Competence of Demolition Operatives Scheme (CCDO) card and current asbestos awareness training in accordance with the HSE's (UK) Approved Code of Practice and guidance (L143) Managing and working with asbestos- Control of Asbestos Regulations 2012.
- 21.5. All plant operators involved in Demolition works must hold a blue CPCS Card pertaining to the plant they are operating:
- Category D90 Demolition Plant - Lifting Operations Only
 - Category D91 Demolition Plant - Pedestrian Operated

- Category D92 Demolition Operations - Skid Steer Tool Carrier
- 21.6. A plan detailing the arrangements for how demolition work will be carried out safely and without hazards to health shall be prepared before demolition or dismantling work begins. This applies to all demolition work regardless of size, duration, or whether or not the job is notifiable (as defined by CDM Regulations).
- 21.7. A Safe System of Work for use of explosives must be produced including:
- Structural survey of the building to determine the collapse mechanism, fall direction, pre weakening requirements, explosive locations and drilling patterns, blast shielding and final collapse requirements
 - Hazardous materials identification and removals
 - Services investigations and removals/diversions in liaison with the relevant utility providers
 - Pre-weakening of the structure in accordance with the provided calculations
 - Test blasts to determine the correct explosive weights
 - Blast area preparations and installations of blast shielding (protection)
 - The required exclusion zone for the demolition, identifying property and persons who will be affected
 - Who will need to be evacuated on the day and their security requirements
 - Exclusion zone implementation and security management on the day
 - Community liaison procedures
 - Means of continuous liaison with the client, local authority, emergency services and utility providers monitoring requirements
 - All environmental monitoring requirements
 - Client, press and public viewing area management
 - Safety management procedures on the day of the demolition
 - Post demolition survey of demolition area and adjacent properties
 - Post demolition meeting with client, local authority and other relevant parties
- 21.8. A plan detailing the arrangements for how demolition work will be carried out safely and without hazards to health shall be prepared before demolition or dismantling work begins. This applies to all demolition work regardless of size, duration, or whether or not the job is notifiable (as defined by CDM Regulations).
- 22. ASBESTOS**
- 22.1. On projects where the presence of asbestos is known, *The Company* will advise *The Supplier*. Specialist Contractors, who are approved and licensed by the Health and Safety Executive for the type of work to be undertaken, will carry out the works.
- 22.2. On project where the presence of asbestos has not been confirmed, but where the nature of the work could give rise to uncharted asbestos finds (i.e. refurbishment work or excavating on brown field sites), a protocol must be established in conjunction with *The Company's* management, to advise all personnel of the possibility of encountering uncharted asbestos and the immediate action to be taken. This will include stopping work, advising management, sealing and identifying the area and arranging for samples to be taken for analysis.

- 22.3. Asbestos must not be removed from site without prior agreement of *The Company's* site management. Asbestos waste must be treated as Hazardous/Special Waste and disposed by of a registered carrier in the manner agreed with the Enforcing Authority (EA/SEPA) to a specified licensed tip.
- 22.4. Everyone working on or influencing work on refurbishment/demolition projects or where there is a foreseeable risk of encountering asbestos must have received UKATA or IATP asbestos awareness training undertaken within the previous 12 months. The use of on-line (e-learning) is ideally suited to meet the requirement of annual refresher training in the 2nd year when supported by face to face initial training and subsequent face to face training every other year.
- 22.5. Asbestos information will be communicated by the Procurement Team for inclusion within enquiries to *The Supplier*, to ensure they are aware of the risk. It is preferable on demolition projects for the asbestos removal contractor and the demolition contractor to be one and the same.
- 22.6. The asbestos contractor (*The Supplier*) must supply a suitable and sufficient Plan of Work including risk assessments and method statements/work package plan (WPP). This will be appraised by *The Company* as per APPENDIX 1 METHOD STATEMENT/WPP APPRAISAL, plus an additional asbestos specific appraisal.
- 22.7. The risk assessment and method statement/WPP must:
- Identify the type of asbestos and who might be exposed
 - Determine the nature and degree of exposure which may occur
 - Consider the effects of control measures which have been or will be taken in accordance with the Prevention or reduction of exposure
 - Consider the results of monitoring of exposure
 - Set out the steps to be taken to prevent that exposure or reduce it to the lowest level reasonably practicable
 - Consider the results of any medical surveillance that is relevant
- 22.8. For non-licensable work, a statement of why the work meets the criteria for non-licensable rather than licensable work, and whether it is>NNLW:
- A description of the work being carried out and the expected scale and duration
 - A description of the type(s) of asbestos and results of any survey or analysis or a statement that the assumption is that the asbestos is not chrysotile alone
 - A description of the quantity, form, size, means of attachment, extent and condition of the ACMs present
 - The method statement/WPP must also include the following:
 - How the spread of exposure will be prevented
- 22.9. Any Asbestos & Respirator zones
- The control measures to be used and maintained
 - Any PPE
 - Air Monitoring requirements
 - UKATA Asbestos in Soils Awareness, or
 - BOHS Awareness of Asbestos in Soils

22.10. Licensable Work With Asbestos

22.11. This training is required for those holding a HSE Licence for carrying out work with asbestos containing materials that are relatively high risk such as laggings, sprayed coatings and insulating board. This training is required for Operatives, Supervisors and Managers.

- UKATA Asbestos Awareness Syllabus (formerly known as Category A)
- UKATA Syllabus for Licensable Work with Asbestos (formerly known as Category C)
- Additional task-specific information, instruction and training
- Face Fit Testing

22.12. Supply Chain Competencies

22.13. The following list of supply chain competencies **must be applied without deviation**.

22.14. **Asbestos surveying.** Companies must be working in accordance with ISO 17020 and be accredited to United Kingdom Accreditation Service (UKAS) or Irish National Accreditation Board (INAB).

It is important to understand that there are two different types of survey:

- Management surveys (asbestos for normal day-to-day occupation and maintenance of the building)
- Refurbishment and Demolition surveys (if refurbishment or demolition works are planned)

22.15. Surveys by accredited organisations must be completed in accordance with HSE guidance document [HSG 264](#).

22.16. **Asbestos removal.** Companies must be a current member of the Asbestos Removal Contractor Association (ARCA) or Asbestos Control Abatement Division (ACAD) and must be independent from the Asbestos surveying company.

22.17. Any asbestos removal company must be licensed for work involving any type or form of asbestos on any Company site or premises.

22.18. **Site Clearance certificate for reoccupation.** Providers must be an appropriate body as competent to perform work in compliance with the paragraphs of ISO 17020 and ISO 17025 which cover organisation, quality systems, control of records, personnel, accommodation and environmental conditions, test and calibration methods, method validation, equipment, handling of test and calibration items, and reporting results.

22.19. **Asbestos Analysts (& Laboratories).** Analysts must be appointed by *The Company*, not the asbestos removal company. Measurement of exposure to asbestos must be carried out by bodies working to ISO 17025 who must be accredited to United Kingdom Accreditation Service (UKAS).

22.20. Before any works are carried out which will knowingly disturb asbestos, the Employers & Public Liability insurance of *The Supplier* involved will be checked first to ensure it includes this risk.

23. **LPG, HFL AND COMPRESSED GASES**

23.1. Prohibitions

23.2. Acetylene

23.2.1. Storage of HFL in plastic containers is prohibited.

23.2.2. Jubilee clips are prohibited for connecting flexible gas supply hoses.

23.2.3. Storage of gas and flammable liquids inside, under and on buildings is prohibited.

23.2.4. The use of compressed gas welding equipment without flash back arrestors is prohibited.

23.2.5. Storage of additional or unnecessary cylinders (including empty) at the workplace is prohibited.

23.2.6. The use of LPG as a fuel at an office or welfare facility (excluding caravans) is prohibited.

23.3. Requirements

23.3.1. Any Supplier bringing LPG, HFL and compressed gas onto site must adhere to the following:

- Cylinders must be stored outside in a safe and secure compound, at an agreed location, not less than six metres from any building and stored in an upright manner. In addition they must be stored at least twenty metres away from timber framed constructions. The compound must be divided to separate full and empty cylinders and contents be clearly marked and include warning: HIGHLY FLAMMABLE – NO SMOKING
- Oxygen cylinders must not be stored alongside flammable gasses and HFLs
- Cylinders in use on site must be secured upright
- Cylinders must be fitted with the correct regulator, hoses, crimped connections and, where used with burning/welding gear, gauges and flashback arrestors
- A programme of planned inspection of all equipment must be initiated and equipment must only be installed and used by competent persons
- Suitable and sufficient numbers of fire extinguishers must be provided at locations where LPGs, HFLs and compressed gasses are used and stored

23.3.2. The use of tar boilers must be agreed with the Site Lead. A specific risk assessment must consider location, operation, supervision and emergency procedures. Tar boilers authorised for use must have temperature gauges, thermal cut off mechanisms and must not be left unattended whilst lit.

23.3.3. The use of compressed gasses for testing must comply with the associated Regulations.

24. **CONFINED SPACES**

24.1. Competence

24.1.1. **Confined Space Co-ordinator**

- Low Risk environment – CITB/National Construction College Certificate in Supervision and Management of Work in Confined Spaces
- Medium Risk environment - City and Guilds National Occupational Standard 6150-61 qualification

High Risk environment - See section High Risk Work.

24.1.2. **Top Man/Person**

- Low Risk environment – Same as CS Entry Team or Top Man Medium Risk Environment
- Medium Risk environment - City and Guilds National Occupational Standard 6150-06 or 56

High Risk environment - See section High Risk Work.

24.1.3. **Confined Space Entry Team**

All team members (including the supervisor for the works who receives the Permit) must hold an accredited City and Guilds National Occupational Standard 6150-01, 02, 51 or 52 Confined Space qualifications applicable to the risk category they are entering, in accordance with the definitions at the end of the document.

24.1.4. **Rescue Team**

All team members hold an accredited City and Guilds National Occupational Standards 6150-02, 02, 51, 52 Confined Space qualification applicable to the risk category they are entering and 6150-05 or 55 Confined Space qualifications. They will also be emergency first aid trained.

24.2. **High Risk Work**

- 24.2.1. High risk working will not be permitted for *The Company* employees, only specialist contractors will be utilised, who will be trained to 6150-03 or 53 Confined Space qualifications.
Their rescue teams will be trained to 6150-03 or 53 and 6150-05 or 55 Confined Space qualification and they will also be emergency first aid trained.

24.3. Suitability for Work in Confined Spaces

- 24.3.1. The Confined Space Co-ordinator carrying out the risk assessment for work in Confined Spaces must consider the suitability of individuals for the work to be done. Where the risk assessment highlights exceptional constraints from the physical layout, the Confined Space Co-ordinator must check that individuals are of suitable build. This may be necessary to protect both the individual and others who could be affected by the work to be done.
- 24.3.2. The Confined Space Co-ordinator must also consider other factors about an individual, for example concerning pre-existing medical conditions (claustrophobia, respiratory conditions like asthma etc.) or physical strength and abilities (e.g. for wearing heavy breathing apparatus), and other advice on an individual's suitability for the work.
- 24.3.3. The Confined Space Co-ordinator must ensure all equipment used within a Confined Space is intrinsically safe.

24.4. Gas Testing & Monitoring

- 24.4.1. Testing of the atmosphere within a Confined Space must be carried out to detect trends or changes in oxygen concentration (above or below ambient levels) or the presence of toxic or harmful gases or vapours, or gases from Dangerous Substances, that may cause asphyxiation, (anoxia, hypoxia or hyperoxia), or potentially explosive atmospheres. The Competent Person responsible for gas testing and monitoring will be identified within the Safe System of Work.
- 24.4.2. The risk assessment process must identify all of the gases that may be present within the Confined Space and ensure sufficient controls, for example adequate ventilation, are implemented prior to entry.
- 24.4.3. The air within the Confined Space must be tested from outside of the Confined Space for a minimum of 5 minutes before entry into the Confined Space and the test results must be recorded.
- 24.4.4. Gas testing may need to be ongoing depending on the nature of the potential hazards and the nature of the work. Conditions can change while workers are inside the Confined Space and sometimes a hazardous atmosphere is created by the work activities in the Confined Space.
- 24.4.5. All gas monitoring equipment must be calibrated, records kept and maintained.

25. **PEOPLE, PLANT AND VEHICLE INTERFACES**

- 25.1. People, vehicle and plant interface must be planned and controlled by application of the hierarchy below (Table 6). A hierarchy means that you start at the top and only if it is not reasonably practicable to do so can the next lower level be used. The justification for progressing down the hierarchy must be detailed within the safe system of work.
- 25.2. Radio communications must be considered for the hierarchy of control levels 2, 3 and 4, unless the risk assessment shows that its introduction would introduce more risk or add no benefit. Director sign off for this agreement must be attained before implementation of the control measures on site.

Table 6

Level	Description	Risk Control Measures	Radio Communication Assessment
1 Eliminate	People plant interface removed	Large fenced off area with people eliminated from the work area. Plant operates without marshalling.	People & plant interface eliminated. Risk eliminated therefore introduction of radio communications does not provide additional benefit.
2 Minimise	Full, physical segregation of people and plant	Observe the Plant Safe Zones by physically restricting people from entering the red and amber exclusion zones. Erect physical barriers around a single operation outside the maximum reach of the machine. This must be marshalled.	Only when the risk assessment identifies that the introduction of radio communications introduces additional risk can the requirement be omitted from a safe system of work with Director authorisation.
3 Minimise	Partial segregation of people and plant	Observe the Plant Safe Zones by restricting people from entering the red and amber exclusion zones using visual means, cones or spray marks that denote the zones. This requires increased supervision and measures to prevent unauthorised access.	Radio communications must be adopted for all activities in this scenario in conjunction with hand signals. Only when the risk assessment identifies that the introduction of radio communications either introduces additional risk or adds no benefit can the requirement be omitted from a safe system of work with Director authorisation.
4 Mitigate	No segregation of people and plant	<p>Exceptional tasks that require essential personnel to enter the amber Plant Safe Zone (for example, kerb laying, disconnecting attachments, slinging loads, off-loading materials from fork lift trucks or lorry beds) must be mitigated through a robust site and task specific Safe System of Work.</p> <p>These tasks must only be conducted with:</p> <ul style="list-style-type: none"> clear communication between the plant operator or vehicle driver and essential personnel performing the task a method of preventing non-authorised access a full time Plant & Vehicle Marshal/Machine Controller increased supervision, and a strict discipline in executing the task exactly as written <p>Personnel must not enter the red zone unless the machine is fully isolated, engine switched off and a method for preventing it restarting is in place (for example the ignition keys are removed from the cab).</p>	<p>No segregation of people and plant. Risk control aids in place, but because of exceptional tasks requiring essential personnel to enter the red zone area radio communications is imperative in ensuring that giving and receiving safety critical information and/or instructions are clear and concise and instant.</p> <p>Only when the risk assessment identifies that the introduction of radio communications either introduces additional risk or adds no benefit can the requirement be omitted from a safe system of work with Director authorisation.</p>

25.3. People, Vehicle and Plant Interface Zones

- 25.3.1. The Yellow, Amber and Red Zones detailed in the People, Vehicle and Plant Interface Zones reference material ([HSF-RM-0047a](#)) must be observed wherever practicable.
- 25.3.2. Details of the People, Vehicle and Plant Interface Zones must be identified in the Safe System of Work and all of the work teams must be briefed on exclusion zones and the safe system of entry into the zones.
- 25.3.3. All plant must have 360 degree vision/detection e.g. multiple mirrors, cameras or other means to eliminate potential blind spots. In the case of excavators dual mirror upper/lower positions to be advocated to ensure visibility when the dipper arm is in the raised or lowered position.
- 25.3.4. Fuelling of plant by means of transferring fuel from one vehicle to another is prohibited.
- 25.3.5. The use of licenced articulated tippers is prohibited without the express approval of a Company Director.
- 25.3.6. Carrying of passengers is prohibited in plant unless a specifically designed seat and restraint system is provided.
- 25.3.7. The carrying of spare buckets suspended from the teeth of an attached bucket is prohibited.
- 25.3.8. PVM's are not authorised to direct traffic on a public highway. The control of traffic on the public highway (for example by means of manual 'stop and go' boards) must be carried out in accordance with the Safety at Street Works Code of Practice.

25.4. Competence

- 25.4.1. **Plant, Vehicle and Pedestrian Coordinator (PVPC)** The PVPC must hold, as a minimum, the CITB Site Management Safety Training Scheme (SMSTS) or Company accepted equivalent (Table 1) and have a level of seniority which allows them to carry out their role without compromise and be given sufficient time to achieve this.
The PVPC must be a person with sufficient skills, knowledge, experience and training to identify effective controls in order to manage the risks associated with the interfaces between people and plant on a project of similar scale and complexity.
- 25.4.2. **Plant and Vehicle Marshals (PVM)** A PVM must have attended a Company recognised PVM course which is either a) a CPCS/NPORS Plant and Vehicle Marshall or b) an internal Balfour Beatty Plant and Vehicle Marshal training course. Any other Supplier or external PVM courses will only become recognised by *The Company* through attendance / vetting by a Balfour Beatty approved PVM Trainer.
- 25.4.3. Training for the role of Plant and Vehicle Marshal must consist of a minimum of 4 hours tuition and include:
 - A pre and post course questionnaire
 - The principles of people, vehicle and plant separation, segregation and control
 - Information relating to the restricted visibility of certain items of plant or vehicles
 - Types of aids that improve visibility
 - Communication protocols and approved devices including the HSE recommended hand signals
 - A practical demonstration by each delegate that can: communicate effectively, position themselves in a place of safety, maintain a clear line of sight with their drivers and correctly use the approved hand signals

- 25.4.4. Whilst carrying out the role of PVM no other duties such as cleaning or daily maintenance to plant or vehicles, opening / closing tail gates, changing attachments or working with any materials including loading / unloading must be permitted. However whilst not engaged in PVM duties other tasks may be undertaken.
- 25.4.5. PVMs must be over the age of 18, have demonstrated a strong mature personality and be physically fit
- 25.4.6. Anyone undertaking the role of Plant and Vehicle Marshall must wear, as a minimum, orange high visibility upper body PPE, Class 2 or above, as well as the hard hat requirements in PERSONAL PROTECTIVE EQUIPMENT section.
- 25.5. Supplier Plant Operators & Vehicle Drivers (PVD)
- 25.5.1. Operators of any item of plant or vehicle drivers must:
- Comply with the requirements detailed in the briefing given by the PVM for the project/site/ location
 - Stop work immediately if any person enters the plant/vehicle interface zone
 - Only carry out refuelling operations in designated locations and in accordance with the specific refuelling procedures
 - Check that mirrors, CCTV, flashing beacons and reversing sounders are in place (where fitted), turned on and fully operational prior to reversing operations being undertaken. All defects must be immediately reported to their Supervisor who will agree on the Safety System of Work or rejection of the load
- 25.5.2. *The Supplier* who utilise mobile plant must:
- Nominate a Plant, Vehicle and Pedestrian Coordinator with the responsibility for the planning and coordination of mobile plant
 - Plan traffic movement to segregate vehicles and pedestrians and eliminate the need to reverse
 - Provide the correct items of plant taking full account of the work activity and site conditions. All plant brought onto site must be of good mechanical condition and be properly maintained in addition to complying with our current Plant Standard.
 - Nominate a Plant and Vehicle Marshall with the responsibility for the marshalling their vehicles and plant including deliveries.
- 25.6. Delivery Vehicles
- 25.6.1. Deliveries to and collections from sites must be planned in advance.
- 25.6.2. *The Company* will communicate site rules to *The Supplier* in advance of all deliveries and collections. *The Supplier* must ensure that this communication is passed onto their drivers
- 25.6.3. A safe means of unloading must be established and agreed prior to dispatch. *The Suppliers* must ensure that the load is stable prior to loosening any restraining straps upon arrival at the loading area. Any unusual loads will only be unloaded when a safe system of work has been agreed between *The Company* and *the Supplier*.
- 25.6.4. As far as reasonably practicable any deliveries will be restricted to off peak times, local hazards (such as school opening and closing times) and any other client specific requirements. Where a supplier turns up outside of any expected/agreed delivery times they will be turned away unless they can be accommodated within the controls contained within *The Company* People, Vehicle, Plant Management Plan.

25.7. Construction Logistics and Community Safety (CLOCS)

- 25.7.1. All UK HGVs (over 3.5 tonnes gross vehicle weight) must conform to the CLOCS Standard for construction logistics. They will be inspected on arrival to site and the result recorded
- 25.7.2. A copy of all compliant and non-compliant records will be issued to the driver of the vehicle, who must be advised to pass the information to *The Supplier*.
- 25.7.3. For all London projects and where CLOCS is a Client requirement prior to 31st August 2017, all non-compliant vehicles will be allowed access to site. Post 31st August 2017, with the exception of continental vehicles travelling from the EU, non-compliant vehicles will be refused access to site. For all other parts of the business, the mandate for compliance is 31st December 2018.

25.8. Reversing

- 25.8.1. The need for any item of plant or vehicle to undergo reversing manoeuvres on site must be avoided where reasonably practicable, by providing one-way systems, turning areas and drive-through loading and unloading areas.
- 25.8.2. Plant and Vehicles must not reverse out of a project/site onto the Public Highway unless a safe system of work can be established. PVM's are not authorised to direct traffic on a public highway. The control of traffic on the public highway (for example by means of manual 'stop and go' boards) must be carried out in accordance with the Safety at Street Works Code of Practice.
- 25.8.3. Unless pedestrian segregation is in place, reversing manoeuvres must be carried out under the direction of a trained PVM.

25.9. HGV Trailers Un/coupling

- 25.9.1. All HGV coupling and uncoupling operations on our sites are prohibited, unless:
- An audible alarm is fitted to the tractor unit warning the driver that the parking brake has not been applied. Such an alarm must be activated by the driver's door, must be clearly audible inside and outside the cab (preferably where the airlines are located). The alarm must also be distinctively different to the audible alarm warning for other matters – e.g. that the vehicle's lights have been left on; AND
 - The semi-trailer is fitted with a device that prevents the trailer's parking brakes being released when the airlines are reconnected, until the driver provides a positive input – e.g. through manually resetting the trailer's park brake or depressing the brake pedal when he/she is back in his cab and in control of the vehicle

26. PLANT AND EQUIPMENT

26.1.1. Prohibition

- 26.1.2. Static Plant that requires the use of a starting handle is prohibited.
- 26.1.3. Large stationary items of plant such as hoists, batching plants, crushers, etc., are not permitted on to site without the approval of the Site Lead. *The Supplier* must receive approval on the selection, siting, erection, operating procedures, inspection schedules, maintenance procedures and ultimate dismantling of the plant.
- 26.1.4. Plant and Equipment Specification Sheets must be complied during the selection and use of static plant.

26.2. Suction Excavators

- 26.2.1. All vacuum/suction excavation equipment must be procured or hired directly through the Balfour Beatty Plant and Fleet Centre of Excellence to ensure equipment and operators are provided to the correct specifications. This applies to both directly procured and subcontracted operations.
- 26.2.2. It is mandatory that suction excavators are supplied with two qualified operators:

- The principle operator must hold the following competency:
 - CPCS card category A78E Vacuum Excavator – LGV – semi powered arm / A78F Vacuum
 - Excavator LGV – fully powered arm
 - Must have a valid, minimum category C, driving licence for driving on the public highway
 - Shall hold a current Driver CPC qualification
 - A minimum NRSWA operative competency
- The secondary operator must hold as a minimum the following competency:
 - (Non LGV driver) – CPCS A78G semi powered arm / A78H fully powered arm

27. TOOLS AND EQUIPMENT

27.1. Prohibition

27.1.1. Craft knives with snap off blades or fixed blade utility knives (see below) are prohibited.

27.1.2.



27.2. Requirements

- 27.2.1. Tools and equipment must be inspected before each use and receive formal planned maintenance in line with the manufacturer's instructions. Records must be made available upon request.
- 27.2.2. **Knives** - All utility knives must either have captured or automatically retractable blades or, where only fixed blade knives are the only practical alternative, they must not have a pointed end and must be holstered when not in use.

28. HAND ARM VIBRATION

28.1. *The Company* is committed to work with Clients and Designers to ensure that so far as is reasonably practicable all HAV exposure is eliminated or controlled through the design process.

28.2. Exposure Prohibition

28.2.1. Any persons engaged in a health surveillance programme and diagnosed with HAVS symptoms in severity stages (late 2V/3V/4V and/or late 2SN/3SN) or who suffer from Raynaud's disease/Raynaud's phenomenon of non-occupational origin using the Stockholm Workshop scales are prohibited from using vibrating tools/equipment.

28.3. Requirements

28.3.1. There are no safe levels of exposure to vibration. Consequently, we must seek to eliminate exposure or reduce it to the lowest reasonably practicable level.

- 28.3.2. The approach of *The Company* is that all works will be planned to eliminate exposure to vibration at source, where practicable. If this is not practicable *The Company* has adopted the Health and Safety Executive's (HSE) points system for measuring vibration exposure.
- 28.3.3. Where there is a diagnosis of HAVS Stage 0 on employment or following an occupational health assessment, the approach of *The Company* is that exposure must not routinely exceed 100 points per shift/day (equivalent to the HSE Exposure Action Value). All reasonable steps must be taken to reduce exposure below this value where practicable.
- 28.3.4. Exposure must never exceed 350 points (50 points lower than the HSE Exposure Limit Value). This value must not be considered to be a target level because of the significant health risks associated with exposures above 100 points.
- 28.3.5. Where an Occupational Health Assessment diagnoses HAVS Stage 1 or Stage 2 Early, exposure to vibration must be reviewed and reduced as far as reasonably practicable in accordance with current HSE guidelines. The exposure for the affected individual must not **routinely** exceed 50 points and must never in total exceed 75 points.
- 28.3.6. Where an Occupational Health Assessment diagnoses HAVS Stage 2 Late or Stage 3 and the assessment recommends an employee is permanently removed from vibration exposure, individuals are prohibited from using hand-held vibrating tools/equipment.
- 28.3.7. *The Company* approach is to utilise an ATPMS where the risk assessment indicates exposure is likely to routinely exceed 100 points or where an occupational health assessment indicates there is a risk to health necessitating restrictions on tool usage.
- 28.3.8. *The Supplier* must demonstrate that their own procedural controls are suitable and sufficient to protect their workforce from exposure to harmful vibration to at least the same standard, and that an appropriate health surveillance programme is in place. *The Suppliers* employees must not be set to work unless they can supply evidence that they are fit to work or have work restrictions following an occupational health assessment.
- 28.3.9. *The Company* Site Lead will confirm *The Suppliers* arrangements for controlling vibration at work during the Pre-Start Subcontractors Meeting prior to works commencing on site. These must include (but not limited to) a risk assessment which includes the vibration risks and the provision of anti/low vibration equipment where reasonably practicable.

29. NOISE

- 29.1. *The Supplier* must, wherever possible, provide silenced plant/equipment and enforce the use of covers, baffles and noise suppressants on *Company* projects.
- 29.2. *The Supplier* must discuss with the Site Lead the location and use of noisy equipment such that precautions can be taken to protect people not directly engaged in the activity. Additionally, where appropriate, create hearing protection zones.

30. MANUAL HANDLING

- 30.1. *The Supplier* must ensure that all relevant personnel are provided with suitable information, training and instruction applicable to the project specific requirements for manual handling.
- 30.2. All personnel undertaking manual handling activities must have attended a Manual Handling Training Course which must as a minimum cover:
- Manual handling risk factors and how injuries can occur
 - How to carry out safe manual handling including good handling technique
 - Appropriate systems of work for the individuals tasks and environment
 - Use of mechanical aids

- Practical work to allow the trainer to identify and put right anything the trainee is not doing safely

30.3. All manual handling activities shall be carried out in accordance with the relevant legislation.

31. PERSONAL PROTECTIVE EQUIPMENT

- 31.1. Mandatory PPE required at all locations must comply with our PPE Standard (See APPENDIX 4).
- 31.2. Additional project/client specific PPE may be required and will be detailed within the Project Management Plan and will be discussed with *The Supplier* in the pre-start meeting.
- 31.3. All *Supplier* employees must keep their torsos covered at all times.
- 31.4. Reflective markings and the role specific helmet decals below are permitted:



First Aider



Fire Marshal



Plant and Vehicle Marshal

- 31.5. If *The Supplier* is **providing products or materials that are sourced from high risk countries of origin** *The Company* will need to understand more about the steps being taking to ensure that modern slavery and labour exploitation does not occur. Suppliers are required to provide us with the information detailed in the MODERN SLAVERY section of this document.

32. TEMPORARY WORKS

- 32.1. *The Company* will ensure the safe design, construction, use, maintenance and removal of all Temporary Works on all their projects. This is irrespective of project size and complexity.
- 32.2. The arrangements for minimising and controlling risks throughout the temporary works life-cycle are set out in *The Company* temporary works procedures. *The Company* Site Lead is responsible for ensuring that a Temporary Works Coordinator (TWC) is appointed. *The Company* TWC is responsible for ensuring that all design and construction work is carried out in accordance with the agreed TW procedures. All suppliers (designers, sub-contractors, third parties etc.) are bound by and must work in accordance with *The Company* TW procedures.
(Similar arrangements will need to be followed on all joint venture projects through the joint venture procedures and the JV TWC).
- 32.3. In essence the agreed TW procedures are controls to ensure that:
- 32.4.
- the Temporary Works Procedures are understood
 - all Temporary Works, are identified and classed, together with their associated delivery dates, designers and checking organisations
 - all Temporary Works are designed and checked by competent people. Demonstration of their competence to discharge their professional responsibilities will be required
 - all construction materials , components and the physical construction of the Temporary Works are inspected and approved to ensure their compliance with the design. This will be done through the Temporary Works Supervisor (where appointed). All approvals will be undertaken by the Temporary Works Co-ordinator
 - all changes are referred to and approved by both the Temporary Works Designer and the Checking Engineer
 - risk assessments are undertaken for the Temporary Works life-cycle; their design, construction , use , modification, maintenance and subsequent removal

- the systems and procedures are effectively and correctly being implemented through defined audits and reviews with improvements undertaken where identified

32.5. We expect *The Supplier* to co-operate with the above and to provide all necessary documentation to allow this process to be completed in a timely and efficient manner

33. TEMPORARY ELECTRICS

33.1. Prohibitions

- 33.1.1. Personal Radios other than as part of the site communication system are prohibited.
- 33.1.2. Radiant space heaters are prohibited unless with the consent of Site Lead.
- 33.1.3. Heaters without thermal overload are prohibited.
- 33.1.4. Multiway plug and socket adapters are prohibited unless with the consent of Site Lead.
- 33.1.5. 3KW heaters used in conjunction with a 13-amp plug and socket – fixed heaters must be wired directly into the wall socket are prohibited.
- 33.1.6. Tubular heaters not fitted with a wire cage are prohibited.
- 33.1.7. Halogen Lamps are prohibited.
- 33.1.8. Portable and hand held tools for use with voltages above 110v are prohibited unless no alternative equipment is available, and providing the equipment is centre tapped to earth, armoured cabled and additional RCDs fitted.
- 33.1.9. 240V chargers for cordless power tools are only permitted following approval by Site Lead and only then in agreed designated locations.

33.2. Requirements

- 33.3. If *the Supplier* is using their own Electrical Safe System of Work (ESSW), this MUST be reviewed and approved in line with *The Company* Electrical Safety Procedure by a Company Authorising Engineer.

NB – this is also the case on any permanent Electrical Systems being controlled by The Supplier, not just for temporary electrics.

- 33.3.1. Site Lead must be consulted on Supplier electrical requirements. *The Supplier* must ensure that all temporary electrical systems (Site establishment and on site 110v power systems) are installed and commissioned by competent persons and that certificates are produced on commissioning and thereafter every three months following inspection of site electrics.
- 33.3.2. All portable electric tools must be inspected prior to each use and be Portable Appliance tested every three months. Suitable records must be maintained and made available when requested.
- 33.3.3. All office portable electrical appliances must be inspected at 12 monthly intervals.
- 33.3.4. All generators must be suitably earthed with the following exceptions:
 - For small scale work of a duration less than one day, portable generators with outputs up to 10kVA need not be earthed, provided that they are only used with Class II (double insulated, or all insulated) tools and equipment
 - Small, single phase generators used for 110v supplies (ratings up to 5kVA) need not be earthed if all of the equipment used is double insulated, or it supplies only one item of earthed equipment and the equipment is bonded with the frame of the generator

34. TRAINING AND COMPETENCE

- 34.1. It is mandatory for everyone engaged on our projects to be in possession of a recognised skills card e.g. CSCS, CPCS scheme commensurate with their job role. Anyone wishing to undertake work on our Project will be required to provide original evidence of their recognised skills prior to admittance to the project.
- 34.2. *The Company* will from time to time host training sessions on site. Subcontract employees must attend these training sessions if requested to do so. Time costs associated with this type of training will be borne by each Supplier.
- 34.3. Subcontract personnel must have received appropriate recognised training and certification and be sufficiently experienced to discharge their responsibilities.
- 34.4. Suppliers employees with training certificates which do not have a fixed expiry date must either:
- Refresh the training after 5 years,
 - Be able to demonstrate current updated knowledge and skills via either Continual Professional Development (CPD), or a Professional Development Review (PDR) process
 - Complete supplementary training suitable to the business (i.e. NEBOSH & IOSH beyond 5yrs takes SMSTS), or
 - No longer undertake activities related to the training.

35. EXCAVATIONS

35.1. Competence

35.1.1. **Excavation Operatives**

- Skills, knowledge, training and experience on the hazards and necessary precautions for excavation works and safe digging practices
- Skills, knowledge, training and experience on the relevant excavation method being undertaken

35.1.2. **Excavation Supervisor**

- A competent person who fully understands the hazards and necessary precautions for excavation works
- Skills, knowledge, training and experience on the hazards and necessary precautions for excavation works, safe digging practices and excavation inspections
- Relevant* installation of excavation support systems training and experience
- Minimum safety training of Site Supervisor Safety Training Scheme (SSSTS) or other Company accepted equivalent (Table 1)

35.1.3. * Training must be relevant to the type of support system used by the project / site (i.e. timber, steel or proprietary systems)

35.2. **Designers of Excavation works**

35.2.1. The Designer must ensure:

- The Project Design Hierarchy (Table 7) is followed
- Pre-construction information is passed onto *The Company*
- That option for redesign to avoid excavating is discussed with *The Company*
- Where the risk of an excavation cannot be avoided, that the residual risk is communicated to *The Company*.

35.2.2. **Table 7**

Level	Description	Risk Control Measures
Eliminate	Remove the risk of an excavation	<ul style="list-style-type: none"> • Avoid the need to excavate by using different techniques
Minimise	Minimise the risk of an excavation causing harm	<ul style="list-style-type: none"> • Avoid the need for people to enter the excavation • Reduce the depth of the excavation needed • Reduce the number of excavations needed • Incorporate permanent works to provide support to the excavation and installing from ground level
Mitigate	Remaining risk must be mitigated through a robust safe method of work	<ul style="list-style-type: none"> • Identify when and where excavation works are required • Pass on all relevant information to <i>The Company</i>

35.3. Requirements

35.3.1. Prior to commencement of excavation works, *The Company* will allocate a design category for the planned works in accordance with the relevant SBU Temporary Works procedure. The category will establish the complexity of the temporary works design and approvals needed.

35.3.2. Temporary Works approval and inspection requirements will be discussed with *The Supplier* at the pre-start meeting

35.3.3. *The Supplier* shall ensure a suitable and sufficient risk assessment, method statement / WPP and task briefing is available prior to excavation works being undertaken. The extent and complexity of these will be dependent on the size and complexity of the task/project.

35.3.4. Where entry is required, Specified Hazards of Confined Spaces must be considered as part of the risk assessment and method statement / WPP; including identifying the safe means of access/egress.

35.4. No Person Entry Excavations

35.4.1. A 'NO ENTRY INTO EXCAVATION' safety sign or tag must be positioned where it can be clearly seen close to the excavation.

35.5. Edge Protection

35.5.1. Suitable steps in accordance with Table 8 (or other external authoritative guidance) shall be taken to prevent a collapse under the weight of the vehicle.

35.5.2. **Table 8**

Level	Description	Risk Control Measures
Eliminate	Remove the risk of falling into an excavation	<ul style="list-style-type: none"> Backfill Cover the excavation (with suitable and secure material for the load)
Minimise	Minimise the risk of falling into an excavation	<ul style="list-style-type: none"> Reduce the number of excavations Guard rail with toe board Edge safe Extended sheet piles Proprietary system Cordon off where works are taking place
Mitigation	Tasks that require essential personnel to work in or around an excavation	<ul style="list-style-type: none"> Robust specific risk assessment and safe system of work required Signs, lighting and guarding to protect the public in accordance with the Safety at Streets and Road Works ACOP Reduced depth of excavation Fall restraint systems

35.5.3. Where plant or vehicles are used to tip materials into an excavation, or whilst extracting materials from an excavation, suitable measures shall be used to prevent the vehicle entering the excavation. In accordance with the Temporary Work design/assessment they shall be placed at a suitable distance from the edge of the excavation to prevent breaking away under the weight of the vehicle, the distance to be agreed with the TWC/TWS (Ex).

35.5.4. Where there is a risk of injury due to falling into an excavation, the edges shall be protected in accordance with Table 8. A suitable type of edge protection/restraint shall be identified through the risk assessment. All materials and equipment required shall be available and inspected before work starts.

Edge protection must only be installed by a competent person. Edge protection must be inspected as part of the excavation inspection.

35.5.5. Scaffold poles used for edge protection rather than distance guarding must be installed by a suitably trained and competent Scaffolder. Depending on complexity this may also require a TW design, inspection and approval by *The Company* Temporary Works Co-ordinator.

An inspection must be carried out by a trained competent person and an appropriate tag (e.g. Scaffoldtag) must be completed and fixed to the scaffold

35.5.6. Sites shall be secured preventing unauthorised access to the works. These arrangements may be over and above the protection to the excavations. Open unattended excavations in high risk locations determined by the risk assessment, will require a minimum of 2m Heras panels or hoarding where practicable.

35.6. Excavated Material (Spoil)

35.6.1. Materials, spoil and equipment shall be kept away from the edge of the excavation by a distance equal to the depth of the excavation subject to a Temporary Works assessment considering short and long term durations. These distances apply unless a temporary works design allows it to be less in stable ground or provides support to the excavation to overcome the surcharge load as well as additional protection to prevent the load falling into the excavation. The height of the spoil must be kept to a minimum to reduce any residual hazards.

- 35.6.2. Where spoil is not going to be re-used on site it must be removed as soon as reasonably practicable as per site waste management plan.
- 35.7. Emergency Evacuation
- 35.7.1. All construction sites with planned or open excavations shall have suitable and sufficient arrangements for dealing with any foreseeable emergency. These arrangements shall take into account the size of the site, location, access, type of work undertaken, equipment or materials being used and the foreseeable emergencies as listed below.
- 35.7.2. The Emergency Plan will be based upon the requirement to contact the Site Lead who will alert others (as required) to provide additional assistance. The activities undertaken will depend on the nature of the foreseeable emergency. The foreseeable emergencies will be highlighted in the risk assessment.
- 35.7.3. Foreseeable emergencies may include:
- Excavation collapse
 - Ground boiling
 - Flooding (ground, surface, mains or supplied water)
 - Ingress of gases
 - Incapacitated individual
 - Structures
 - Vehicles entering excavations
 - Fire
 - Train derailment due to subsidence of track buckle (where applicable)
 - Any combination of the above
- 35.7.4. Note: This list is not exhaustive.
- 35.7.5. The Emergency Plan must address the following aspects, as a minimum:
- Evacuation (e.g. loss of an egress route)
 - Assess danger caused by the emergency
 - Rescue
 - Emergency services and first aid
 - Secure the site
 - Notify the relevant third parties (e.g. utility owners, highways)
- 35.7.6. Evacuations shall be planned and practiced appropriate to the type of works. Casualties must not be moved unless they are in danger and it is safe to do so or in extreme cases to prevent further injury. Arrangements shall be in place to retrieve casualties from excavations. The requirements will depend on the depth of the excavation. It is not acceptable to rely solely on the emergency services as an emergency plan.
- 35.8. Change Control
- 35.8.1. Any change to the excavation necessitated by a change in the ground conditions, weather, duration of exposure, size of excavation etc. will require:
- The work to be stopped and re-assessed

- Update risk assessment and method statement if necessary
- Re-brief the team
- Record changes

35.8.2. If any aspect of the temporary design cannot be implemented or there are changes on site which require a new or a redesign of the temporary works, this must be referred to the TWC/TWS (Ex). All associated works will be stopped until the new temporary works have been designed, checked, approved and then implemented.

35.9. Excavation Tags

35.9.1. For Category 2 excavations and above, an Excavation Tag will be used and will remain visible at all times at or adjacent to the entrance of the excavation. See Image 1 & Image 2

35.9.2.

WARNING
UNLAWFUL REMOVAL OR INTERFERENCE WITH THIS SIGN COULD
MAKE YOU LIABLE TO PROSECUTION AND FINES

DAILY INSPECTIONS

Week 1	Date	Signature	Week 2	Date	Signature

WEEKLY INSPECTIONS

Week 1	Date	Signature	Week 2	Date	Signature

Scafftag
TEL: +44(0)1454 488 400 | www.scafftag.co.uk | © Copyright Brady Corp. Ltd 2013 | Ref: E731-XXX

Image 1

REASONS FOR NO ENTRY

Sign of Ground Movement
Inadequate Access / Egress
Plant & Vehicle incapable of movement
Sign of Contaminated Ground
Risk of causing Stability of Adjacent Structures / or inadequate control measures in place
Ground or Service Water present / Not dealt with
Edge Protection not present
Risk associated with Confined Spaces / Ventilation monitoring measures not in place
Overhead or Underground Services not identified / supported or control measures put in place:
Daily inspection not carried out

Image 2

35.9.3. The Excavation Supervisor, following their visual inspection, will sign off and date the Excavation Tag on a daily basis. The Site Team will not be allowed to enter the excavation unless the Excavation Tag is valid for that shift.

36. **UNDERGROUND AND OVERHEAD SERVICES**

36.1. Competence

36.1.1. Persons at risk from underground and/or overhead services must have the following competencies. Some SBU's have additional training requirements to those listed below. See Table 11

36.1.2. **Site Lead**

- SMSTS or other company accepted equivalent
- Ability to interpret utility drawings in live locations
- Current certified technical ability to use underground utility location equipment
- Knowledge of the dangers and control measures associated with underground and overhead utilities
- Information and instruction on the requirements of this procedure and how to utilise it in an operational environment

36.1.3. Works Supervisor

- SSSTS or other company accepted equivalent
- Ability to interpret utility drawings in live locations
- Technical ability and practical experience to use underground utility location equipment provided
- Training in the dangers and control measures associated with underground and overhead utilities relevant to the works

36.2. Operatives working near Utilities 'Construction Team'

- Training in the dangers and control measures associated with underground and overhead utilities relevant to the works
- Information and instruction on this procedure and how to utilise it in an operational environment

36.3. Planning

- 36.3.1. A desktop survey older than 90 days must be considered historical and must be refreshed before construction work commences, unless access to the area is strictly controlled such that there is no potential for additions/diversions or modifications carried out by others.
- 36.3.2. *The Supplier* must ensure suitable and sufficient Risk Assessment, Method Statement/Work Package Plan and Briefing(s) are produced for the planned works.
- 36.3.3. Where work is to be carried out in proximity to live high voltage cables, high or intermediate pressure gas or oil/fuel pipelines and it must be isolated for safe digging; the Asset Owner(s) must be contacted to request an isolation to work. Contact must be made as early as possible to allow them to isolate supplies. *The Supplier* must plan project schedules to allow sufficient time for this to happen.
- 36.3.4. If the utility cannot be isolated, an alternative safe way of doing the work will be required and must only be undertaken with consent of the Asset Owner. Risk Assessment must be undertaken by the Pre-Construction Lead or Site Lead (dependant upon project status) and documented in the Construction phase plan to support this decision.
- 36.3.5. On site presence of the Asset Owner may be required during excavation works involving high risk utilities (as described above). The Site Lead must ensure that this is arranged in advance of the excavation works.

36.4. Exclusion Zones for Underground Services

- 36.4.1. When planning operations in the proximity to utilities *The Supplier* must first consider the suitability of the equipment for the task, especially any Exclusion Zones. For more information see: Minimum exclusion zones for underground utilities APPENDIX 3.

36.5. Identifying Utilities

- 36.6. *The Company* 'Authorising Person' must ensure that prior to breaking ground a Cable Avoidance Tool and Signal Generator (CAT and Genny) survey is undertaken by a person with the technical ability to use underground utility location equipment. The survey must extend outside of the proposed excavation limits so that nearby services that could unexpectedly deviate into the works are identified and the locations confirmed. The CAT and Genny must be:
- In accordance with the plant specifications (which are available to download at: <http://www.balfourbeatty.com/suppliers/important-documents-for-suppliers/>)
 - within calibration dates, and

- have a pre-use check completed before the survey

36.7. Once utilities have been located, the ground surface above the utility and beyond the outer edges of the proposed excavation must be highlighted/marked up to identify the positions and route of the utilities as a minimum.

36.7.1. Where practicable tape or spray paint must be used in accordance with the below extract from Specification for Underground Utility Detection, Verification and Location – PAS 128-2014:

Item	Colour
Water	Blue
Gas	Yellow
Electric All Voltage	Red
Data/Telecom	White
Oil/Fuel Pipeline	Black
Sewerage	Black
Duct	Grey
Exclusion Zone	Orange
Other e.g. Heated District Network	White (potentially)

36.8.1. The Works Supervisor must ensure the marking is regularly inspected and maintained for the duration of the immediate works.

36.9. Requirements

36.9.1. *The Supplier* will comply with *The Company's* Plant and Equipment Specification Sheets (including Cable Avoidance Tools), which are available to download at:
<http://www.balfourbeatty.com/suppliers/important-documents-for-suppliers/>

36.9.2. When selecting items of plant used under overhead utilities or obstructions preference must be given to those that cannot reach the utility/obstruction. Where this cannot be achieved, physical restraints and warning devices must be used. Selecting plant/equipment and associated checklists must be in accordance with *The Company's* Plant and Equipment Specification Sheets.

36.9.3. Trial holes and breaking ground within exclusion zones must be completed under the control of an Authorisation to Work Near Existing Services (AWNES) (known in some SBUs as a permit).

36.9.4. Trial holes (using vacuum excavation as the default option, or suitable hand tools where this is not reasonably practicable), must be completed as necessary, to confirm the position of any detected services. Hand digging must only be undertaken using safe excavation practices in accordance with Digging Techniques for Utilities Below Hard Surfaces ([HSF-RM-0015a](#)).

36.9.5. A Works Supervisor must be in attendance at the site all times when work is carried out under an Authorisation to Work Near Existing Services (AWNES)/SBU Permit

36.9.6. Tracer tape will be installed at the correct depth above utilities and a survey conducted to verify its integrity.

36.9.7. As the excavation proceeds, drawings must be rechecked and the ground re-scanned at a minimum of 300mm intervals using the Cable Avoidance Tool and Signal Generator (CAT and Genny) equipment by the Works Supervisor.

36.10. Personal Protective Equipment

36.10.1. In addition to Company mandatory PPE requirements all operatives working near to any utilities must wear:

- One/Two piece flame retardant coveralls (inherent permanent flame retardant fibre) , and
 - Flame retardant hi-vis jacket or vest (if the coveralls are not hi-viz)
- 36.10.2. Any other member of the team at risk during inspection or supervising the work area must also wear flame retardant clothing.
- 36.11. Utilities Encased in Concrete
- 36.11.1. Excavating close to utilities buried in or located beneath concrete is extremely hazardous. Where utilities are buried in or located beneath concrete, work must not commence until a detailed safe system of work (including, wherever possible for high risk assets i.e. electricity cables or gas mains, isolation or finding alternative routes) has been agreed with the Asset Owner and approved by the HSE Lead and Project Lead.
- 36.12. The Use of Steel Pins, Spikes or Long Pegs
- 36.12.1. Steel pins, spikes or long pegs which could damage utilities laid at shallow depth must not be used where avoidable. However, where they are used, they must be treated as any other breaking ground activity and the controls detailed within this procedure applied, including the AWNES. The use of survey pegs (400mm long) as well as Survey equipment or other equipment that does not penetrate ground beyond topsoil or surface layer (approx. 300mm) must be risk assessed utilising the utility plans and the control measures recorded on an AWNES by the Authorising Person.
- 36.13. Protecting and Supporting Existing Utilities
- 36.13.1. An underground utility which has been exposed must be:
- appropriately supported
 - protected from accidental damage
 - not used as a means of access or egress in an excavation, and
 - visually inspected periodically for signs of damage / deterioration or change
- 36.13.2. A Temporary Works Design must be obtained where damage to utilities is likely to occur due to incorrect support and its adequacy verified by the Asset Owner (Refer to SBU specific Temporary Works procedure).
- 37. OVERHEAD POWER CABLES**
- 37.1. To ensure the health and safety of people and prevent damage to existing utilities no work shall be started in the vicinity of overhead power cables without the approval of *The Company* Site Lead and until all precautions and protection in accordance with the HSE Guidance Note GS6 'Avoidance of Danger from Overhead Electric Power Lines' are taken.
- 37.2. Working Near to Overhead Utilities
- 37.2.1. When working near overhead utilities, *the Supplier* must ensure:
- The hierarchy (Table 9) is followed for the avoidance of danger from overhead utilities
 - Activities are programmed to allow adequate time to follow the safe method of work
 - Options for redesign to avoid utilities are discussed with *The Company*
 - Where the risk of contact with overhead utilities cannot be avoided, that the residual risk(s) are communicated to the Working Supervisor

37.2.2. **Table 9** Hierarchy of working near Overhead Utilities

Level	Description	Risk Control Measures
Eliminate	Remove the risk of damaging utilities	Plan works away from utilities Arrange for live utilities to be diverted
Minimise	Minimise the risk of damaging utilities or harm	Apply the relevant exclusion zone detailed within the AWNES /SBU permit Arrange isolation of live utilities Set up goal posts for crossing points Select plant & equipment that cannot encroach on the exclusion zone
Mitigation	Remaining risk must be mitigated through a robust safe method of work	Apply the relevant exclusion zone detailed within the AWNES/SBU Permit Establish the 'safety clearance' distance with the Asset Owner Apply physical restrictions to plant capable of encroaching safety clearance Wear flame retardant PPE

37.3. Exclusion Zones for Overhead Lines

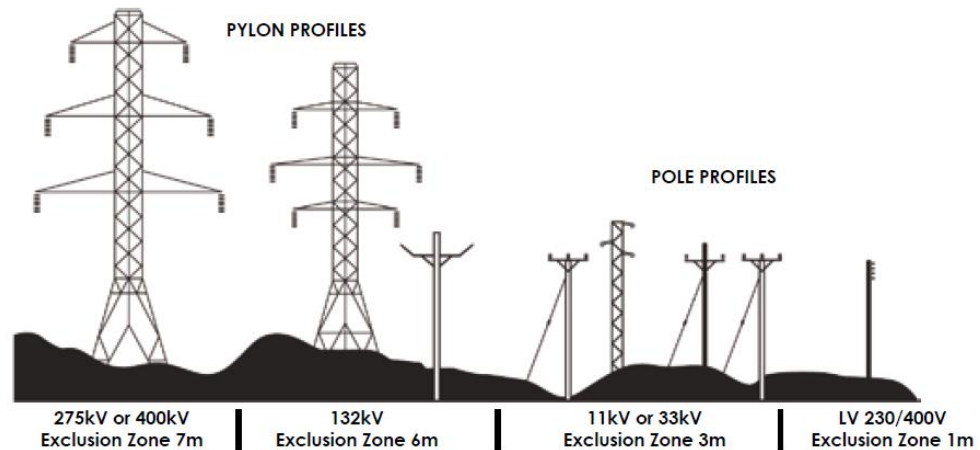
37.3.1. The minimum extent of exclusion zones vary according to the voltage of the line and the Asset Owner. The table below (Table 10) provides guidance on the minimum distances around overhead lines which must not be encroached by any plant, equipment or person. The Asset Owner must be contacted to confirm these and any additional requirements.

37.3.2. The below table is an extract from Energy Networks Association 'Guide to the Safe Use of Mechanical Plant in the vicinity of Electrical Overhead Lines'.

37.3.3. **Table 10** Exclusion zones for overhead lines

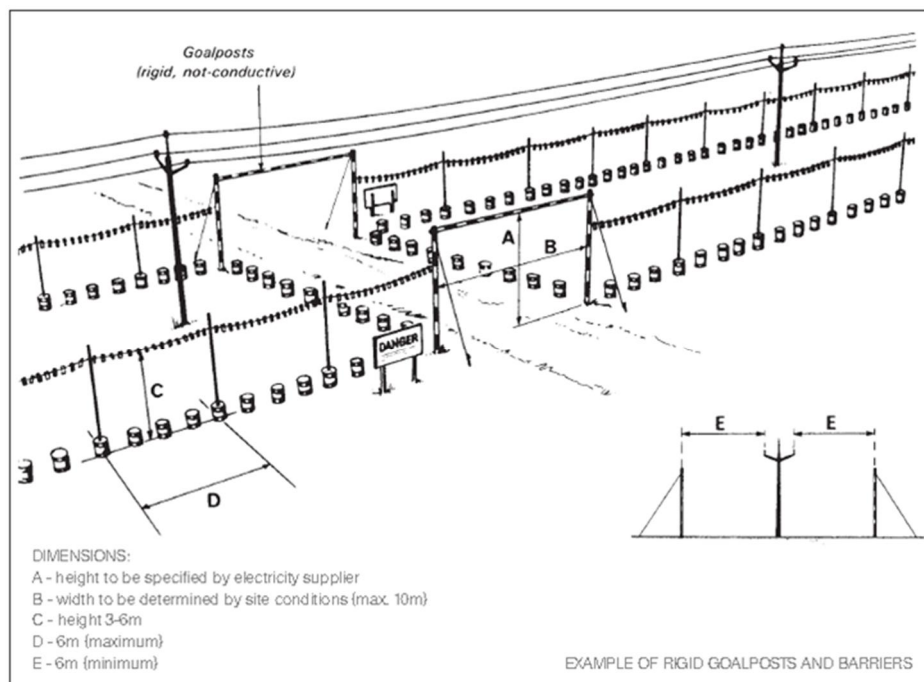
Description	Exclusion Zone
Telecom Lines	1 metre
Low-Voltage Line	1 metre
25kV Network Rail Traction Supply	2.75 metres
11 kV and 33 kV Lines	3 metres
132 kV Line	6 metres
275 kV and 400 kV Lines	7 metres

37.3.4.



- 37.3.5. Under no circumstances must any part of plant or equipment such as ladders, poles and hand tools be able to encroach within these zones. Allow for uncertainty in measuring the distances and for the possibility of unexpected movement of the equipment due, for example, ice or wind conditions.
- 37.3.6. Where there will be no work or passage of plant underneath overhead lines, the risk of accidental contact can be reduced by erecting ground level barriers to keep people and plant away from the wires. Discharging or off-loading deliveries and the storage of plant and materials must be undertaken outside of the Exclusion Zone.
- 37.3.7. Barriers (coloured red and white for example) (Figure 1) can be run parallel to overhead utilities which would restrict access near to or under them. The exclusion zone must extend a minimum of 6m horizontally from the nearest wire on either side of the overhead line.
- 37.3.8. If it is necessary for any plant or equipment capable of breaching the exclusion zone to pass underneath the overhead line a passageway using rigid non-conductive goal posts (Figure 1) through barriers must be installed. In this situation:
- Keep the number of passageways on site to a minimum
 - The route of the passageway must be defined using non-conducting materials
 - Be clearly visible, for example by highlighting with red and white stripes and illuminating at night
 - Warning notices must be displayed at either side of the passageway, on or near goalposts and on approaches to the crossing giving the crossbar clearance height and instructing operators to lower jibs, booms, tipper bodies etc.

Figure 1 Example of Rigid Goalposts and Barriers (abstracted from GS6)



37.4. Working Within the Exclusion Zone of Overhead Power Lines

- 37.4.1. It may be possible to work within the exclusion zone however this must be risk assessed by the Site Lead, and result in there being no possibility of encroachment into the safe clearance distances detailed in the risk assessment.
- 37.4.2. Where works are planned to be undertaken within the exclusion zone of overhead line utilities *The Company* 'Authorising Person' must detail the control measure in the Authorisation to Work Near Existing Services (AWNES) (known in some SBUs as a permit) to ensure the safety clearance is not breached.
- 37.4.3. The safety clearance must be established in advance of the works with the Asset Owner.
- 37.4.4. The height of the lowest conductor must be obtained from the Asset Owner and information on the relevant clearances required to comply with HSE Guidance Document GS6 (Avoiding Danger from Overhead Power Lines). Noting that the lowest conductor position can change due to temperature and electrical loading, therefore it is critical to obtain Asset Owner approval of any encroachment within the GS6 stipulated distances.
- 37.4.5. A request must be made to the Asset Owner to attend site to discuss the proposed work and provide line profile drawings.
- 37.4.6. The Asset Owner has the authority to authorise the Authorising Person to establish the safety clearance using either a calibrated height meter or by mathematical calculation using survey instruments.
- 37.4.7. The clearances must be referenced against those in Energy Networks Association, Technical Specification Document for Overhead Line Clearances ([ENATS 43-8](#)) and confirm with the Asset Owner that they are sufficient for the planned work.
- 37.4.8. When establishing minimum clearances required for an object underneath an OHL, refer to the highest minimum clearance identified in [ENATS 43-8 table 6.2](#) (e.g. for a 400kV line maintain a clearance of 5.3m between the line and the maximum possible height of the object)

- 37.4.9. Once the safety clearance has been established a Safety Clearance Check Sheet must be completed by *The Company*.
- 37.4.10. All requests for information with the Asset Owners must be recorded and auditable.
- 37.4.11. The Works Supervisor is responsible to ensure that signage and barriers remain in place during the works, and they are maintained.
- 37.4.12. Delivery Drivers, particularly tipper trucks, are required to receive a briefing on the OHL risks, at arrival on site.

38. WELFARE FACILITIES

- 38.1. *The Company* is committed to provide a high standard of welfare facilities and accommodation on all of its projects. Supply chain are required to support this policy by assisting in maintaining them in a safe and clean condition and in particular, the canteen must not be used to store materials, deposit clothing, or for smoking. Any person found to be mis-treating the welfare facility will be liable to summary removal from site and possible prosecution. If a Supplier has any concerns regarding the welfare facilities provided he must immediately draw it to the attention of *The Company* Site Lead and also raise the issue in the Site Safety Committee.
- 38.1.1. Facilities provided by *The Supplier* must be to an acceptable standard under current construction regulations. In particular:
 - Welfare facilities must have sufficient lighting, heating and ventilation. Storage or drying of clothing should only be allowed within specifically designed drying rooms and not within general welfare facilities. Gas and electric (open bar/non convection) fires/heaters must not be used on company projects
 - Welfare facilities and equipment must be maintained in a clean, tidy and hygienic condition
 - Welfare services (water main) must be protected from inclement weather in order that they remain operational at all times
 - Welfare facilities must be accessible and suitable for use taking into account the needs of those with disabilities.
 - Every effort shall be made to encourage the use of the canteen facilities provided
 - Sufficient chairs and tables must be provided to accommodate all persons for whom the facility is intended
 - A sufficient means of heating/chilling food and boiling water must be provided to accommodate all persons for whom the facility is intended. Unsecured hot water urns must not be used on company projects
 - Gas rings and open electric fires are prohibited.

Toilets and washing facilities must include:

- Sufficient number of separate facilities for men and women
- Supply of toilet paper and toilet consumables and, for female employee, a means of hygienically disposing of sanitary dressings
- Basins, with plugs, each with its own hot/warm and cold running water supply and large enough to wash hands and forearms, with sufficient soap, barrier creams, moisturisers and drying materials

39. HOUSEKEEPING

- 39.1. *The Supplier* must keep their work area free from the risk of slips, trips and falls at all times and remove all waste to a designated area. All combustible waste must be removed each day to a designated area and covered to prevent accidental or malicious fires. Supervisors must continually monitor and record compliance.

40. PUBLIC INTERFACE

- 40.1. Where any subcontracted activity is to be carried out in an area accessible to the public, *The Supplier* must produce a site specific Method Statement/WPP and Risk Assessment, including a procedure detailing the controls which are to be applied to ensure the safety of the public.
- 40.2. *The Supplier* will ensure that they conform to the project specific requirements regarding maintaining the integrity of the site boundary.
- 40.3. Where any proprietary barriers are provided by *The Supplier*, they will be erected in accordance with the manufacturers' instructions or subjected to temporary works design.

41. WOODWORKING MACHINERY

- 41.1. Carpentry/Woodworking Machinery can only be used by persons who have been trained and hold a relevant CSCS card commensurate with their role and briefed on the safe use of the tool, in accordance with manufacturer's instructions, and along with the safe system of work.
- 41.2. Chain saws are not permitted onto site without the permission of *The Company* Site Lead. They will only be permitted when their use is essential and not as a convenience tool to cut light or medium timbers. Subcontract management must only authorise competent trained persons to use chain saws and they must ensure that all necessary safe system of work and protective clothing is provided and worn.
- 41.3. Where possible the use of engineering control measures for airborne dust must be employed. The first line of defence must not be PPE; it must be the provision of, where appropriate, dust collection bags and extraction at source.

42. WORKING AT HEIGHT

42.1. Prohibitions

- 42.1.1. The use of following items are prohibited on all Company properties and projects for work at height:
- Low Level Access Systems (Metal Trestles/Bandstands/Ironmen)
 - Stilts
 - Hop Ups
 - Kick Stool Steps
 - Plastic/GRP Modular Crash Deck/Working Platform System
 - Exiting or entering a MEWP is only permitted when it is not elevated or not operating at height, unless the access or egress is covered by a safe system of work and specific risk assessment approved by the HSES Advisor and *The Company* Site Lead's Line Manager.
 - Driving MEWPs from outside the platform without a prior task specific risk assessment and where not allowed through the manufacturer's instructions is prohibited
 - The throwing ("bombing") of materials or objects at/from height is prohibited
 - The use of Netlon or bunting type materials for Work at Height Exclusion Zones is prohibited

- The use of 21ft scaffold tubes for hemping / topping out is prohibited
- Where there is a risk of dropping tools or equipment from height, tool tethering must be implemented.

42.2. Requirements

- 42.2.1. A risk assessment and a method statement/WPP, task briefing sheet produced for all work at height specifying the type of access and workplace provided to prevent persons and materials falling. The method statement/WPP must be submitted to and approved by *The Company*. Those engaged in the operation must receive a task briefing in the contents of the risk assessment and method statement/WPP. Records of such briefings must be maintained by *The Supplier* on site.
- 42.2.2. The planning of work at height activities must identify suitable means of rescue for all stages of the work, including the provision of suitable facilities and resources to rescue personnel from their working area if they become ill, incapacitated or they are involved in any type of incident, Personnel must demonstrate competence in such matters.
- 42.2.3. Before allowing any power operated mobile work platform to operate, supervision must complete *The Company* checklist available from the Site Lead. *The Supplier* must ensure that all statutory inspections are carried out and a planned maintenance programme is applied. Regardless of the type of access or work platforms provided, it must be erected, operated and maintained by persons who are competent and formally trained and certificated. Due consideration must be given to the emergency recovery of persons from such work platforms.
- 42.2.4. All Mobile Elevated Work Platforms (MEWPs) used on *The Company* projects by *The Supplier*, must be designed to prevent entrapment through sustained involuntary operation of the MEWP, through interference with either electronic or mechanical systems. Examples include SkySiren or SiOPS pressure sensitive systems, shrouded protection to the platform controls or Sanctuary Zones.
- 42.2.5. Safety Nets and Soft Landing Apparatus must be used in conjunction with fall prevention measures. These measures must be considered through a robust risk assessment. Personal protection such as harnesses and lanyards must only be used where collective protective measures are not suitable. In certain circumstances the use of a combination of both collective and personal protective systems may need to be considered.
- 42.2.6. A safety exclusion zone must be set up below netting erection works.
Safety Nets. Safety net installers/providers must be members of FASET.
Safety netting installation must be carried out by a holder of the CSCS / FASET Safety Net Rigger Card. Note that this is not applicable to the nets used to protect assets during overhead line work
An exclusion zone must be set up below netting erection works. Net clips must be securely fixed to the net to prevent accidental release during installation or dismantling.
- 42.2.7. All safety netting must overlaid with appropriate fine-mesh debris netting. Consideration must be given to the type of materials likely to fall, e.g. fixings or tools, when choosing the overlay debris netting. Debris falling into the net must be retrieved by a FASET trained operative.
Where appropriate safety netting will be overlaid with debris netting, consideration must be given to the type of materials likely to fall, e.g. fixings or tools, when choosing the overlay debris netting

42.3. Scaffold

- 42.3.1. Scaffolding contractors must be a member of NASC. High standards of management and supervision are required on all scaffolding works and *The Supplier* must provide within the package an overall manager who has been specifically instructed and holds demonstrable competence (CISRS) to ensure these standards are implemented and maintained. Erection drawings and / or a TG20 NASC compliance sheets must be on site and in the possession of the erection Supervisor prior to commencing the work and must be available at the time of handover and when any inspections are undertaken.
- 42.3.2. Unless a scaffold is a basic configuration described in recognised guidance e.g. NASC Technical Guidance TG20 for tube and fitting scaffolds or manufacturers' guidance for system scaffolds, the scaffold must be designed by calculation by a competent person, to ensure it will have adequate strength and stability. All scaffolding must be erected, dismantled and altered in accordance with either NASC guidance document SG4 for tube and fitting scaffolds or the manufacturers' erection guidance for system scaffolds. All scaffold design details will be provided to *The Company*. Any person who erects or dismantles a scaffold must hold a current and valid CISRS qualification, relevant to the type of scaffold being erected or dismantled, certificated to the Construction Industry Scaffolder's Record Scheme (CISRS) and be able to demonstrate Continued Personal Development (CPD) in line with NASC requirements (1st June 2017) .
- 42.3.3. Before allowing any mobile scaffolding tower to be used, *The Supplier* must ensure that it is suitable for its intended purpose including advance guard rail systems, that the erection instructions are on site, and that the operatives erecting, dismantling the scaffold are competent and have-PASMA and be able to demonstrate this on request. Toe boards and double guardrails will always be in use, irrespective of platform height. Scaffold must be close boarded to prevent people, material or tools falling, and must be kept clear at all times to allow free access of 600mm. No gaps greater than 25mm-Scaffold towers which are identified as incomplete or unsafe must be rectified or otherwise dismantled.
- All prefabricated mobile towers must be erected in accordance with the safe system of work and manufacturer's instructions by trained erectors. Preference to be given to collective measures (i.e. advanced guardrail) where practicable.
- All working platforms must have two handrails and toe boards in place to the correct spacing in accordance with the manufacturer's instructions and as defined within Schedule 2 of the Work at Height Regulations. Where this cannot be achieved e.g. in arches, tunnels etc. a safe system of work must be implemented.
- Unless the tower has been specifically designed for such use, the following activities are never carried out from a mobile tower:
- Fixing of sheeting, or other similar materials
 - Grit blasting or water jetting
 - Using the tower to hoist materials or support rubbish chutes
 - Attaching, supporting plant or materials to the exterior of the tower
- 42.3.4. Erecting, altering or dismantling scaffolds must be carried out in compliance with the National Access & Scaffolding Confederation Guidance Note SG4 (latest addition) 'The Use of Fall Arrest Equipment Whilst Erecting, Altering or Dismantling Scaffolding'. This lays down the criteria for the erection/dismantling sequence and the compulsory use of fall restraint/arrest equipment. The 'Beta Guard' or similar advanced guardrail type system, designed to provide collective protection must be used with all scaffolds where practical.
- 42.3.5. Tube and fitting scaffold standards must not be hemped / topped out above waist height. System scaffold hems must be as small as practicable (dependent upon the system's smallest unit) and but must not be more than 4m (i.e. the largest available unit).

- 42.3.6. Scaffolding Inspectors. A person who has passed a CISRS Basic Scaffold Inspection Course is deemed competent to inspect basic scaffold structures, as defined in NASC document TG20. All other complex scaffold structures must be inspected by one of the following:
- An Advanced Scaffolder who was not involved in erection of the structure
 - A person who has passed a CISRS Advanced Scaffold Inspection course
 - A temporary works designer or scaffold designer
- 42.3.7. Persons who are required to carry out inspections of System Scaffolds must, in addition to the above, attend a product training course for the specific system and hold certification for that scaffolding system.
- 42.3.8. The 'Scafftag' system operates on all projects and must be fitted to all scaffolds and mobile towers. These must be completed by authorised competent persons.
- 42.4. Open Edges and Openings
- 42.4.1. *Netlon type fencing as an edge protection barrier is prohibited.*
- 42.4.2. All edges and openings at excavations, slabs, floors, decking, etc., must, at all times, be effectively protected to prevent persons or materials falling through. Edge protection must conform to EN13374 and be approved by *The Company* Site Lead. All openings must be clearly marked.
- 42.4.3. Dependent upon the contents of their work package, *The Supplier* may be required to take control of areas or elements of the works, where such areas include openings etc. They must establish, control, implement and monitor effective measures to ensure that the requirements above are maintained at all times.
- 42.4.4. Works must be planned and the risks assessed to ensure that protection is in place at openings during all phases of the works.
- 42.4.5. All openings in concrete slabs, floors, decking, risers and manholes must be effectively highlighted and protected with securely fixed covers (Approved by *The Company* Temporary Works Coordinator) to prevent persons or materials falling through them.
- 42.4.6. Lift shafts must be protected by:
- 42.4.7.
 - A proprietary system to prevent persons, tools, equipment or materials falling into them, or if this is not available, a physical secured barrier
- 42.4.8.
 - Warning signage, or have an authorised person access control system established
- 42.5. Push Around Verticals (PAVs)
- 42.5.1. PAV Operators. PAV Operators must have IPAF or CPCS training applicable to the item of plant to be used and must be given familiarisation training on the specific equipment prior to use. This familiarisation must include machine specific emergency lowering information.
- 42.5.2. Using a MEWP must wear an appropriately attached safety harness complete with restraining lanyard. The only exception to this implicit requirement where it can be demonstrated, through appropriate Risk Assessment that using a scissor lift type platform not overreaching. The wearing of a full body harness (BS EN 361) and restraint lanyard (BS EN 354), which restricts the limit of travel to the confines of the basket, is only mandatory in Boom Type MEWPs and must be worn *and attached to a designated anchor point* at all times. The only exception to this mandate is when working over or adjacent to water that presents a risk of drowning if the MEWP inadvertently overturns. In such circumstances an automatically inflating life jacket must be worn.
- Scissor lift MEWPs must only be traversed when in lowered position. If traversing is required at any other height, a safe system of work must be in place and a harness and restraint lanyard must be worn.

- 42.5.3. All working at height equipment must display a valid inspection tag (scafftag or similar).
- 42.5.4. Suitable protection measures must be put in place (e.g. Tool tethering, fans, exclusion zones etc) where there is a significant risk of tools or materials being dropped from above head height onto people below.
- 42.5.5. A rescue plan and sufficient competent personnel to effect a rescue in reasonable time must be in place at all times when such platforms are in use.
- 42.6. Mast Climbing Work Platforms (MCWP)
- 42.6.1. **MCWP Coordinator.** A MCWP Operator must have attended the relevant IPAF Operator (either OP or OP(M)) training course and have a minimum of an SMSTS qualification (or company accepted equivalent Table 1).
- 42.6.2. **MCWP Operator.** An MCWP Operator must have attended the IPAF Operator – OP training course and must also receive MCWP specific familiarisation training from the supplying company's demonstrator.
- 42.6.3. **MCWP Mobile Operator.** Must have attended IPAF Mobile Operator – OP(M) training course. In addition, the MCWP Operator must also receive MCWP specific familiarisation training from the supplying company's demonstrator.
- 42.6.4. Temporary Suspended Access Equipment (Cradles)
- 42.6.5. **Cradle Coordinator.** A Cradle Coordinator must have attended the cradle specific familiarisation training from the supplying company's demonstrator and have a minimum of an SMSTS qualification (or company accepted equivalent Table 1).
- 42.6.6. **Cradle Operators.** Cradle Operators Must have attended the cradle specific familiarisation training from the supplying company's demonstrator.
- 43. YOUNG PERSONS**
- 43.1. Persons under the age of 18 years will only be allowed on site with the express permission of *The Company's* Site Lead. All requests must be in writing, prior to the individual attending site and must include details of the visit, works to be undertaken, anticipated duration on site and supervision details.
- 44. ENVIRONMENT & SUSTAINABILITY MANAGEMENT**
- 44.1. *The Company* operates an environmental management system certified to ISO 14001 which provides a framework for managing and controlling the environmental impacts and risks of its activities. *The Supplier* is required to either have their own ISO 14001 certified management system or to manage their activities on behalf of *The Company* in accordance with *The Company* certified system. As a minimum *The Supplier* must comply with *The Company* Environmental Procedures. Further advice on this can be obtained from *The Company* Project Lead.
- 44.2. *The Supplier* must work in accordance with all requirements set out in *The Company* Project Management Plan and its subsection Appendix C the Sustainability Plan.
- 44.3. *The Supplier* is required to identify significant environmental risks within their risk assessments and document the control measures to be deployed to mitigate / control the risk(s) identified within their work package.
- 44.4. *The Supplier* must provide specific sustainability and environmental data in the format and frequency required as identified during the subcontractor pre-award meeting.
- 44.5. *The Company* has a minimum expectation that *The Supplier* will have an environmental and sustainable procurement policy.

- 44.6. Balfour Beatty will expect *The Supplier* to undertake their duty of care on third party waste carriers and waste facilities, by ensuring that all permits and licences are up to date, and that facilities are operating legally.

45. ENVIRONMENTAL NOISE/VIBRATION

- 45.1. *The Supplier* must discuss with *The Company* Project Lead the location and use of noisy equipment such that precautions can be taken to protect local communities and people not directly engaged in the activity.
- 45.2. Where reasonably practicable every effort must be made by *The Supplier* to provide the most efficient and effective available equipment.
- 45.3. *The Supplier* must, wherever possible, provide silenced plant/equipment and enforce the use of covers, baffles and noise suppressants.
- 45.4. All plant must be shut down/switched off when not in immediate use (where possible).
- 45.5. Where possible:
- Equipment/plant must be located away from site boundaries so it is less likely to cause a nuisance to third parties.
 - Always try to plan works within normal working hours
 - When not possible suitable noise / vibration reduction screens to be provided
- 45.6. Works outside of usual site hours must be agreed and approved with *The Company* Project Lead to ensure if a section 61 consent needs to be applied for it is completed before the commencement of works and that the planned activities meet operating or section 61 consent requirements. The management controls implemented must apply best practise to minimise the potential for noise and / or vibration emissions from the planned activities as well as meeting any operating or consent requirements.

46. POLLUTION PREVENTION AND REPORTING

- 46.1. All pollution incidents must be immediately reported to *The Company* Project Lead.
- 46.2. *The Supplier* must identify any activity which has the potential to pollute the environment and they must implement procedures to eliminate, minimise and control the risk.
- 46.3. Emergency pollution response training and access to spill kits must be provided to all plant and refuelling operatives, as a minimum.

47. WATER

- 47.1. *The Supplier* must not discharge or abstract water without permission. This includes all discharges to surface and foul water drainage systems as well as discharges containing silt made to land or as water runoff from planned activities.
- 47.2. *The Supplier* is only to wash out concrete residues (e.g. from chutes) within secure designated areas. Water must be contained and never poured straight to ground or allowed to leak.
- 47.3. *The Supplier* must take all reasonable steps to minimise water usage including:
- using products with lower embodied water;
 - reducing water use during construction and or delivery;
 - enabling water efficiency in use; and
 - co-operate and co-ordinate with others including contractors, the supply chain and consultants, engaged in connection with the Works in furtherance of this clause

47.4. Suppliers of cement, bricks, concrete blocks, steel, rebar, cabling, glass, plaster, timber, PVC, asphalt and aggregates must quantify and provide details of embodied water (cradle to grave) as required to meet BREEAM/Ecohomes or other customer requirements.

48. DUST

48.1. Best practicable means must be used when planning and undertaking works to reduce or prevent emissions to air.

48.2. Water or other means of suppression/extraction must be used to prevent dust generation.

48.3. Wagons must be sheeted when they are delivering or carrying dusty materials off-site or within site.

49. EMISSIONS

49.1. Non Road Mobile Machinery (NRMM) is defined as any mobile machine, item of transportable industrial equipment, or vehicle - with or without bodywork - that is:

- not intended for carrying passengers or goods on the road
- installed with a combustion engine - either an internal spark ignition (SI) petrol engine, or a compression ignition diesel engine

49.2. All NRMM rated between 37kW and 560kW for use in Greater London on project sites must meet Stage IIIA requirements¹ as a minimum or Stage IIIB for projects that fall within London's Central Activity Zone (CAZ) and Canary Wharf (see <http://www.nrmm.london/>).

49.3. Where Stage IIIA or Stage IIB requirements cannot be met, equipment must be fitted with appropriate retrofit abatement technology that has been registered and endorsed by the [Energy Saving Trust NRMM certification scheme](#).

49.4. Where *The Supplier* owns or hires equipment that is equipped with retrofit technology they must provide supporting information on the retrofit technology to the project lead.

49.5. Where NRMM does not meet emission standards and retrofit abatement solutions do not exist exemptions may be sought. There are three exemptions categories:

- 'Block' where the type of NRMM plant is not currently manufactured at the EU stage stated in the supplementary planning guidance (SPG) or there is an insufficient quantity of compliant equipment in the UK supply chain and retrofit is unviable. At the time of writing there are only two 'block' exemptions for Stage IIIB in place which apply until 1st September 2018. These are for truck mounted cranes and constant speed engines (such as generators). This equipment still has to meet Stage IIIA requirements¹
- 'Viability' where the NRMM plant is not currently manufactured to meet the EU stage as stated in the SPG or there is an insufficient quantity of compliant plant in the UK supply chain for the task, however, it meets the next best available EU stage and retrofit is unviable, following robust consideration
- 'Short-term' where the NRMM plant is on site for a period of no greater than 30 days to account for a range of potential circumstances where equipment is urgently required or for a very short period

49.6. For 'Viability' and 'Short-term' exemptions, *The Supplier* must contact the Greater London Authority (GLA) directly on a case by case basis (Details can be found [here](#)).

If approved 'Viability' exemptions are valid for 12 months from the date of approval.

Short-term exemptions are only valid for 30 days, if approved.

¹ Stage IIIA and IIIB are outlined in EU Directive 97/68/EC standard for Nitrogen Oxides (NOx) and Particulate Matter (PM) emissions

- 49.7. For 'Viability' or 'Short-term' exemptions *The Supplier* must be provided with exemptions before physically delivering the NRMM to site unless they are dealing with a genuine emergency (e.g. flood) and provide supporting information on the exemptions to the project manager.
- 49.8. From 1st September 2020 the NRMM requirements will apply to plant and equipment rated above 19kW and set the following minimum standards:

	1 st September 2015 – 31 st August 2020	1 st September 2020 onwards
Greater London	Stage IIIA requirements	Stage IIIB requirements
Central Activity Zone (CAZ) and Canary Wharf (North of the Isle of Dogs)	Stage IIIB requirements	Stage IV requirements

- 49.9. Where NRMM is delivered to project sites, *The Supplier* must inform *The Company* Project Lead with information on the machinery type, machinery manufacturer, engine manufacturer year, plant ID code, engine EU type approval number, engine power in kW and the EU engine emission stage so that this can be logged on NRMM database.
- 49.10. Where NRMM is removed from site, project managers must be informed so that they can update the NRMM database.

50. ENERGY AND CARBON

- 50.1. *The Supplier* must take all reasonable steps to minimise energy usage including:
- reducing energy use during construction and or delivery
 - enabling energy efficiency in use i.e. providing instructions for more energy efficient use
 - developing a suitable management plan to monitor, manage, report and feedback on the performance for the above component(s); and
 - cooperate and coordinate with others including contractors, other suppliers and consultants, engaged in connection with the project in furtherance of this clause
- 50.2. Suppliers of cement, bricks, concrete blocks, steel, rebar, cabling, glass, plaster, timber, PVC, asphalt and aggregates are expected to be able on request to quantify the embodied carbon (cradle to grave) of the materials and provide details as required to meet BREEAM/Ecohomes or other customer requirements.
- 50.3. Suppliers of fleet, plant and equipment must provide details of fuel and energy use to *The Company*.
- 50.4. *The Supplier* is expected to evidence and validate any claims and on request. *The Supplier* will also be required to provide *The Company* with all relevant documents relating to the embodied carbon of the products and services provided, either in the form of a lifecycle assessment (LCA), Environmental Product Declaration (EPD) or carbon analysis and provide any relevant data so *The Company* can assess the impact of the product or service. This will be determined in relation to the scale of the carbon impact of the product or service. *The Company* would also expect to be kept updated on any carbon savings or losses associated with any changes in the manufacturing process of the product or service.

51. ECOLOGY AND ARCHAEOLOGY

- 51.1. A project's location may require access to be controlled and restricted due to its protected status as an archaeological site of interest or as a natural habitat of specific ecological value. If required *The Supplier* must not commence work until specific regulatory authority permits have been gained.
- 51.2. *The Supplier* is required to identify significant environmental risks in their risk assessments and document the control measures to be deployed to mitigate / control the risk within their work package to protect animals, habitats and archaeology / ancient monuments.
- 51.3. *The Supplier* must stop work and report any unexpected wildlife or archaeology if discovered during the planning or completion of activities.
- 51.4. The supply chain is expected to follow the advice and recommendations of *The Company* Environmental Advisor and / or the archaeology or ecology specialists employed by *The Company*.

52. CIRCULAR ECONOMY AND RESOURCE EFFICIENCY (WASTE)

- 52.1. The supply chain must design, specify and procure materials, products and services with the greatest circular-economy benefits.
- 52.2. The supply chain must take all reasonable steps to minimise waste, reduce packaging and give preference to materials and products with the greatest reused or recycled content and provide documented evidence to *The Company*.
- 52.3. The supply chain must contribute to the projects waste management plan and identify potential waste streams that could arise during their works including the potential for the discovery of contaminated land (its identification and management), along with estimated total quantities of each waste type that this will produce as well as the planned route of disposal and meeting of 'Duty of Care' obligations.
- 52.4. The use of packaging must be minimised and where appropriate made from materials that can be reused, recycled, or recovered wherever feasible including the use of take back and collection services for their materials and associated packaging for subsequent reuse, recycling or recovery.
- 52.5. The supply chain must make available all relevant information associated with primary, secondary and tertiary packaging in accordance with the Packaging Waste Regulations. Suppliers will be required to take back any packaging deemed excess or non-compliant at their own expense.
- 52.6. *The Supplier* must comply with the site waste segregation strategy, including the avoidance of cross-contamination of segregated (non-mixed) skips.
- 52.7. Where *The Supplier* makes their own arrangements for waste storage and disposal they must provide records of all transfers from the project and provide regular reports on the type and quantity of waste reused, recycled, otherwise recovered, or disposed of to landfill.
- 52.8. *The Supplier* is expected to demonstrate a 'duty of care' for all waste transfers.
- 52.9. Where *The Supplier* is storing, processing or using waste on a project, a permit, license or exemption may be required from the Environmental Regulator. All conditions within the permit, license or exemption must be adhered to.
- 52.10. Suppliers of recycled aggregate must be in full compliance of the duty of care requirements of the Waste Management Regulations or the WRAP Quality Protocol. Delivery documentation shall state that the product was produced under a quality protocol.
- 52.11. Where possible *The Supplier* must employ closed loop waste systems, which utilise the waste product from one process or product in another product or process. This can be part of the same construction project or can be through collaboration with other projects / organisations which use the waste as their raw material.

- 52.12. Suppliers carrying out demolition and deconstruction subcontractor must consider maximising the recovery of materials and resources; minimising demolition arising's through recycling and identifying reuse opportunities; the production/supply of construction materials from recovered demolition arisings; design modification to limit amount of demolition (such as façade retention and other existing structure reuse); and input into new design proposals to assist future demolition.

If the supply chain uses third party waste contractors, they must report their waste returns to *The Company* on a regular basis to allow monitoring of sustainable efficiencies.

53. ETHICAL SOURCING

- 53.1. When sourcing *The Supplier* must consider the ethical records of the materials, labour, products and services themselves and of the companies behind them (to ensure the most ethical companies are rewarded and the least ethical are not) based on the following issues recognising the need for active due diligence and an approach of continual improvement;
- **Code of Conduct** - *The Supplier* shall ensure that all factories and premises used in the manufacture and supply of products and services are compliant or can demonstrate they are working towards meeting *The Company* Code of Conduct
 - **Bribery and Corruption** – *The Supplier* shall procure materials, products and services only from suppliers demonstrating and implementing zero tolerance to bribery and corruption, regardless of country of operation and avoid sourcing from oppressive regimes
 - **Sustainable Development** – *The Supplier* shall evaluate and address together the economic, social and environmental challenges and impacts of sourcing labour, materials, products and services
 - **Social Value** – *The Supplier* shall consider the added economic, social and environmental value that is provided and agree a plan to deliver and report on this
 - **Data & Digital** – *The Supplier* shall provide specifications that include social and environmental requirements in addition to technical characteristics and economic indicators, such that these will form part of a digital footprint of goods/services, suited to supporting BIM and collaborative working
 - **Traceability and Transparency;** - *The Supplier* shall demonstrate a traceable and transparent supply chain for labour, materials, products and services
 - **Health, Safety and Wellbeing** – *The Supplier* shall benefit the health, safety and wellbeing of all stakeholders including the natural environment
 - **Legality of Materials** - *The Supplier* shall demonstrate materials are of legal origin
 - **Commodity Materials** - *The Supplier* shall source commodity materials (such as aggregates, bricks, timber and steel) from the country of operation and/or project/site location, unless there is an environmental, social and economic argument to do otherwise; reduce 'materials miles' where possible, or at least show this issue has been given due consideration
 - **Complex/Manufactured Products** - *The Supplier* shall optimise social, environmental and economic impacts and opportunities of complex/manufactured products over their entire lifecycle
 - **Certification and Accreditation** - *The Supplier* shall specify and procure using credible and recognised responsible sourcing and certification schemes, where available

54. MATERIAL SPECIFIC REQUIREMENTS

- 54.1. Where it is identified that a material is required which is contrary to the requirements set out in this document and no suitable alternative is available, then a Concession must be sought from the project lead or environment or sustainability lead, supported by a Materials Justification Report, prior to acquisition.
- 54.2. Failure to seek approval may result in the material or product being removed, disposed of and replaced, with the full cost borne by *The Supplier*. Retrospective approval will only be considered in exceptional circumstances.

55. SUPPLIERS OF TIMBER BASED PRODUCTS (INCLUDING TIMBER PACKAGING)

- 55.1. *The Supplier* must ensure that all the timber they use, including packaging, is legally and sustainably sourced and provide documented evidence to *The Company*.
- 55.2. *The Company* will only accept procurement and use of timber and timber products from independently verified, legal and sustainable sources, such as those certified under the Forest Stewardship Council ('FSC'), Programme for the Endorsement of Forest Certification ('PEFC') or that the forest of origin is licensed by the EU Forest Law Enforcement Governance and Trade ('FLEGT') scheme.
- 55.3. In addition a copy of the relevant current Chain of Custody (COC) certificate number relating to the material supplied must be provided on the delivery documentation and subsequent invoice to satisfy *The Company* policies and applicable projects Ecohomes / BREEAM audits and assessments.
- 55.4. For reused or reclaimed timber brought to site but not specifically purchased, a statement or other guarantee that the timber is reused or reclaimed must be provided on delivery.
- 55.5. All treated timber must have a certificate of treatment supplied and issued to the site at the time of delivery.
- 55.6. Failure to comply with these requirements will result in the delivery being rejected or returned (at your companies expense), as non-compliant.
- 55.7. All timber packaging supplied from outside the UK from other EU countries or Switzerland must be bark-free or kiln-dried and marked 'KD' to meet the EU Protected Zone requirements set out in the EU Plant Health Directive, or must be ISPM15 compliant. All wood packaging from Portugal must either be ISPM15 compliant or otherwise marked to show that it was manufactured in another EU member state. Wood packaging from outside the EU or Switzerland must be ISPM15 compliant.

56. SUPPLIERS OF STEEL PRODUCTS OR COMPONENTS

- 56.1. All steel for publicly funded projects must confirm its purchase point and report in accordance with the Public Contracting Regulations to meet the requirements of the Most Economically Advantageous Tender requirements noted.

57. SUPPLIERS OF REINFORCEMENT BAR OR REINFORCED CONCRETE CONTAINING REINFORCEMENT BAR

- 57.1. We expect all suppliers of reinforcement bar to be aware that *The Company* is a member of the UK Steel's Charter for British Sustainable Steel. It is a specific requirement that only carbon steel reinforcement (for use in concrete) adhering to the Framework Standard for Responsible Sourcing (BES 6001) is supplied by our suppliers, or associated agents. All steel reinforcement must be specified to comply with BS 4449 or BS 4483.
- 57.2. The supply of loose cut and bent bar must be fully traceable, contain 98% recycled content, be CARES & ECO Approved to BS 8666 and is to be obtained from firm(s) holding valid certificates of approval.

- 57.3. Any manufacture of pre-assembled metal active gas (MAG) welded fabrications must use reinforcement bar in a specified size range to the relevant requirements of BS7123 and CARES Quality and Operations Assessment schedules 6 and 10 using tack welds and semi-structural joints produced under factory conditions.
- 57.4. All deliveries are to be pre-slung and accessible from ground level with fully certified lifting equipment. Flat woven webbing slings provided must be to current BS EN 1492-1:2000 standard and have CE marking and certification. This must be provided with each delivery or upon request as required by site.

58. SUPPLIERS OF DIMENSIONAL STONE

- 58.1. Responsible sourcing of natural stone / primary aggregate products must be evidenced through compliance with a recognised responsible sourcing scheme (e.g BES6001), certified by a third party. We expect suppliers to be active members in either the Ethical Trading Initiative (ETI Stone Group), TFT (The Forest Trust) Responsible Stone Programme, or the United Nations Global Compact and be members of the Stone Federation GB.
- 58.2. Products supplied must therefore be able to show a clear chain of custody from source to point of use. EU sourced stone will have the appropriate CE marking and certification provided with each delivery.
- 58.3. All commercially exploited (UK) primary aggregate shall include the current HMRC aggregate levy charged at the appropriate rate where applicable.

59. SUPPLIERS OF VOLATILE ORGANIC COMPOUNDS (VOC) PRODUCTS (PAINTS, SEALANTS, ADHESIVES, ETC.)

- 59.1. *The Supplier*, as far as is reasonably practicable, shall substitute unhealthy material for a healthier alternative.
- 59.2. *The Supplier* shall give preference to products / materials where treatment applications are applied off site.
- 59.3.

Material/Product	Limits of VOC, Formaldehyde and other Emissions
Form release agents	350g/l VOC content OR water based
Gloss paint for external or high wear use	<50% VOC content OR Accredited under the Finnish M1 label
Primers	<50% VOC content OR Accredited under the Finnish M1 label
Sealants	Water based OR Accredited under the German Blue Angel Eco-Labeling Scheme
Particle boards, Fibreboards, MDF and Plywoods	Zero-formaldehyde boards Isocyanate bound boards Accredited under BS EN 13986:2002 OR accredited under the German Blue Angel Eco-labelling Scheme OR accredited under the Nordic Swan Eco-labelling scheme

60. SUPPLIERS OF HEAVY METALS AND BROMINATED FIRE RETARDANTS

- 60.1. Heavy metals and brominated fire retardants suppliers shall, as far as is reasonably practicable, minimise the concentrations of heavy metals and brominated fire retardants in products and packaging being supplied.
- 60.2. The level of certain heavy metals and brominated fire retardants in electrical and electronic equipment is controlled by the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2006 (as amended).
- 60.3. The level of certain heavy metals in packaging is controlled by the Packaging (Essential Requirements) Regulations 2003 (as amended).
- 60.4. The total content of the heavy metals Cadmium, Hexavalent Chromium Lead and Mercury in packaging or in any packaging components must not exceed 100ppm:
- 60.5. The supply chain shall keep details on the substances and materials associated with products and services supplied.

61. OTHER MATERIALS

- 61.1. *The Supplier* must source products and materials responsibly, taking into account environmental and social impacts and where applicable ensure they are compliant with recognised and credible standards for ethical sourcing i.e. BES6001 or as otherwise defined by *The Company* (more information can be found in our Material Selection Strategy).
- 61.2. *The Supplier* must avoid supplying or using materials with a high environmental, social, health or reputational risk, or those that are likely to be limited due to forthcoming legislative requirements.
- 61.3. Where possible *The Supplier* must provide declarations on the embodied impacts of their products, by reference to bespoke Environmental Product Declarations (EPD) or documents such as the BRE Green Guide to Specification or other credible Life Cycle Analysis based tool

62. RED LIST

- 62.1. The following shall not be used within the delivery of any Company contract or construction of any of our works under any circumstances.
- 62.2. **Alkylphenols**
Asbestos
Chlorofluorocarbons (CFCs)
Formaldehyde (added) The requirement is to eliminate the formaldehyde content in bound boards and products used in internal fit-out and structures.

Hydrochlorofluorocarbons (HCFCs) - The requirement is to eliminate HCFC use in line with UK legislation
Polychlorinated Biphenyls (PCBs)
Phthalates
Short Chain Chlorinated Paraffins
Wood treatments containing creosote, arsenic or pentachlorophenol

63. GREY LIST

- 63.1. The following are materials where *The Company* seeks primarily to avoid, or where no suitable alternative is available, to minimise their use.
- 63.2. **Non-FSC or PEFC Timber** - The requirement is to procure 100% of timber products including packaging from recognised responsible sources preferably FSC or PEFC in line with our procedure for Responsible Timber Procurement
- 63.3. **Cement and Virgin Aggregates** - The requirement is to maximise the use of cement replacement products in concrete mixes and to maximise the use of Recycled Concrete Aggregate (RCA).

- 63.4. **Scarce Minerals** - The requirement is to substitute the use of scarce minerals wherever possible otherwise apply the principles of the waste hierarchy to ensure use is reduced or minerals are reused or recycled.
- 63.5. **Hazardous Chemicals** - The requirement is to eliminate the use of hazardous chemicals covered by the [Stockholm](#) and [OSPAR Conventions](#), whilst ensuring management in line with the [European Chemicals Regulations](#). The following have been identified as being harmful to living creatures and where possible alternatives shall be sought.
- 63.6. Bisphenol A (BPA) Endrin
Cadmium Heptachlor
Chlorinated polyethylene Hexachlorobenzene (HCB)
Chlorosulfonated polyethylene (CSPE) Mirex
Chlorobenzene Polychlorinated biphenyls
Chloroprene (neoprene) Polychlorinated dibenzo-p-dioxins
Chromium VI Polychlorinated dibenzofurans
Chlorinated Polyvinyl Chloride (CPVC) Toxaphene
Halogenated flame retardants (HFRs) Polyvinyl Chloride (PVC)
Lead (added) - The requirement is to eliminate the use of PVC in permanent applications, and minimise its use in temporary applications. Permanent works include: flooring, cabling, trunking, ducting, skirting, roofing (incl. preparatory systems), rainwater and drainage products, pipework, cladding, windows, wall covering, signage, baggage systems and display stands
Mercury
Perfluorinated Compounds (PFCs)
Polyvinylidene Chloride (PVDC)
Hydrofluorocarbons (HFC's)
Aldrin
Chlordane
p,p'-Dichlorodiphenyltrichloroethane (DDT)
Dieldrin
64. **SUPPLY CHAIN DEVELOPMENT**
- 64.1. *The Supplier* is expected to have a sustainability champion and be able to demonstrate how they are changing behaviours of their employee's to improve sustainability outcomes.
- 64.2. *The Supplier* is expected to improve the sustainability knowledge amongst their teams and *The Company* encourage them to become active members of the Supply Chain Sustainability School and work towards bronze, silver and gold level accreditation as a demonstration of competence. www.supplychainschool.co.uk.
- 64.3. The supply chain are expected to identify opportunities to improve sustainability outcomes and share with *The Company* to improve the way we deliver our projects and achieve the goals of our UK Sustainable Procurement Policy Statement.
65. **PAYMENT**
- 65.1. *The Supplier* must pay their suppliers on time and in accordance with the contract conditions. *The Company* has demonstrated their commitment to payment on time by signing up to the Prompt Payment Code and will publish our performance. *The Company* expect its suppliers to commit to the principles of this code as a minimum and would encourage them to publish their performance.
66. **SUPPLIER DIVERSITY**
- 66.1. *The Supplier* is required to provide details to *The Company* of attributable spend with local suppliers and subcontractors ('Local' is considered to be within a 30 mile radius of the project unless otherwise defined).

- 66.2. *The Supplier* who are not classified as Small or Medium Sized Enterprise's (SME's) are required to provide details to *The Company* of attributable spend with SME's.
- 66.3. *The Supplier* must openly advertise any remaining supply chain opportunities (i.e. where no contractual arrangements have been agreed by the date of the main contract award).
- 66.4. *The Supplier* shall at all times have in place, and keep updated, an appropriate Diversity & Inclusion Policy which reflects and compliments the relevant statutory provisions relating to diversity and equality law in relation to race, sex, gender reassignment, age, disability, sexual orientation, religion or belief, pregnancy, maternity or otherwise and which includes details of their approach to monitoring, recruitment, bullying and harassment and training.

67. DEVELOPING TALENT

- 67.1. *The Supplier* is required to provide details to *The Company* of programmes and policies in place to promote local employment, including graduate programmes, apprenticeships and use of local labour, in particular for those economically inactive and disadvantaged groups or individuals as well as any attributable outcomes achieved.
- 67.2. *The Supplier* is encouraged to sign up to the 5% Club as a demonstration of commitment to work toward having a minimum 5% of our UK workforce enrolled on formalised apprentice, sponsored student and/or graduate development schemes within five years. <http://www.5percentclub.org.uk/>.

68. LABOUR STANDARDS

- 68.1. In performing its obligations under the agreement, *The Supplier* shall ensure that they and their supply chain:
- Comply with all applicable laws, statutes, regulations and codes from time to time in force including but not limited to the Modern Slavery Act 2015, United Nations Global Compact and the International Labour Organization, International Labour Standards
 - Afford their employees the freedom to choose to work for them. Employees must be free to leave the supplier after reasonable notice is served. *The Supplier* must not use forced, bonded or non-voluntary prison labour
 - Demonstrate a commitment to equality of opportunity for individuals and groups enabling them to live their lives free from discrimination and oppression
 - Impose working hours on their staff which are compliant with national laws or industry standards
 - Under no circumstances abuse or intimidate, in any fashion, employees and have appropriate disciplinary, grievance and appeal procedures in place
 - Work within the laws of their country
 - Take appropriate measures to ensure the health and safety of their workforce and the wider public
 - Offer wages and benefits that at least meet relevant industry benchmarks or national legal standards

69. MODERN SLAVERY

- 69.1. *The Supplier* are required to provide details to *The Company* of the steps they are taking to ensure Modern Slavery and Labour Exploitation are not taking place in its supply chains or in any part of its business.
- 69.2. *The Supplier* is required to notify *The Company* as soon as it becomes aware of any instance of Modern Slavery or Labour Exploitation taking place in its supply chains or in any part of its business.

69.3. *The Supplier* is required to:

Maintain a complete set of records to trace the supply chain of all Goods and Services provided to *The Company*

Implement annual supply chain audits, either directly or through a third party auditor to monitor performance

69.4. If *The Supplier* is providing products or materials that are sourced from high risk countries of origin we will need to understand more about the steps being taking to ensure that modern slavery and labour exploitation does not occur. *The Supplier* will be required to provide *The Company* with the following information:

- A copy of Modern Slavery Statement or other document detailing the steps being taken to ensure that modern slavery and labour exploitation does not occur in *The Suppliers* business or their supply chain
- Details of the % of products / materials by value sourced / manufactured / produced by *The Supplier* for *The Company* from high risk countries of origin as defined by the [Global Slavery Index 2016](#) (Split by direct and via subcontractors)
- or as a minimum details of the % of products / materials by value sourced / manufactured / produced by *The Supplier* from high risk countries of origin as defined by [the Global Slavery Index 2016](#)
- Evidence that *The Supplier* conducts regular supply chain audits, either directly or through third party auditors to monitor performance, including;
 - Summary of audits or other activity undertaken by the supply chain or via third parties to assess labour standards in their supply chain operating in high risk countries of origin
 - Sample of evidence confirming audits have been undertaken i.e. Audit extract or other declaration
 - Sample or other evidence confirming action is taken to address issues highlighted at audit
 - Copy or copies of template audits that detail the areas covered

69.5. The highest risk countries include: India, China, Pakistan, Bangladesh, Uzbekistan, North Korea, Cambodia, Qatar, Democratic Republic of the Congo, Sudan, Iraq, Afghanistan, Yemen, Syria, South Sudan, Somalia, Libya, Central African Republic, Mauritania, Haiti, Dominican Republic, Myanmar and Turkey. For more information please visit

<http://www.globalslaveryindex.org/findings/>

70. COMMUNITY ENGAGEMENT

70.1. *The Supplier* is required to engage positively with the local community and support *The Company* to minimise disruption to local people by actively supporting the 'Involved' Plan (*The Company's* community investment programme) of the project or through their own plan and providing suitable evidence.

71. QUALITY MANAGEMENT

71.1. *The Company* operates a Quality Policy that requires the implementation of a Business Management System across its operations that conforms to ISO 9001. Accordingly, *The Supplier* is required to co-operate and comply with the policy.

71.2. *The Supplier* shall identify their representative(s) responsible and accountable for all Quality related activities. The representative(s) must be demonstrably competent in the activities that they are being asked to manage.

- 71.3. *The Supplier* is to provide Quality Plans, Programmes, Inspection & Test Plans (ITPs) and any associated quality records as identified in the Tender and the subcontractor pre-award meeting.
- 71.4. *The Supplier* must provide ITPs for their contract works, or come under an agreed overarching trade / discipline / area ITP, as agreed at the subcontractor pre-award Meeting.
- 71.5. Supplier ITPs must identify the following, as a minimum:
- What is to be inspected/tested
 - Against what specified criteria and/or requirement
 - Who is to be involved
 - When and how often tests and inspections are to be carried out
 - How will it be recorded
 - Identify responsible person for sign off
 - Final record requirements
- 71.6. And must also include where appropriate the following:
- Competence requirements for each activity
 - Design sign offs and approvals
 - Any other approvals required e.g. planning & end user
 - Off Site Fabrication Inspection & Test requirements
 - Identification and traceability of material and information including unique coding
 - Factory Acceptance Tests (FAT) and release requirements
 - Site Acceptance Tests (SAT) requirements
 - Shipping, transportation, movement and lifting requirements
 - Storage, packaging, protection and preservation requirements
 - Material receipt requirements
 - Agreed product or service acceptance criteria e.g. via benchmarks, samples and /or mock ups.
 - Sampling requirements e.g. by attributes through ISO 2859
 - Any acceptance criteria that uses statistical techniques e.g. CUSUM in concrete
 - Quality related Life cycle requirements
 - Final test, sign off and commissioning requirements
 - Quality records requirements
- 71.7. *The Supplier* may be issued with *The Company* ITP template to enable them to prepare this documentation, in accordance with Company requirements, where their own template is inadequate.
- 71.8. ITPs produced by *The Supplier*, either using their own template or *The Company* template, shall be checked, verified and endorsed as acceptable by both *The Supplier* and an appropriate member of *The Company* Project Management Team prior to any subcontracted works commencing, using *The Company* ITP appraisal process. Works shall only commence once the ITP has been accepted by *The Company*

- 71.9. *The Supplier* shall strive for delivering an inspection and test process that supports a Defect-Free Delivery and reduces or eliminates defects and re-work. Additionally *The Supplier* shall support *The Company* Defect-Free Delivery cultural programme and any events established by the Project or *The Company*.
- 71.10. *The Supplier* will build on *The Company* four Quality Commitments through tool box talks and on site leadership actions. The four commitments are aimed at all who work on the Project. They are:
- I understand what is required
 - I have the right skills and knowledge
 - I have the right tools and materials
 - I know what is required to carry out, complete, handover and protect the works
- 71.11. *The Supplier* shall ensure any non-conforming product, process or service are immediately notified to *The Company*. Additionally where a non-conformance or delay is raised or realised that adversely affects our customer's interests, *The Supplier* is expected to conduct a root-cause analysis investigation on the reasons for the delivery of a poor quality product, process of service and confirm corrective and preventive actions.
- 71.12. *The Supplier* shall undertake the works in accordance with this document, the agreed inspection and test regimes and any other Quality related items as defined within the Pre-start Subcontractors meeting.
- 71.13. *The Supplier* shall drive for continuous improvement as well as the on-going review and proposing of innovation and best practice. Where required *The Supplier* shall utilise digital solutions for quality management, support Short Interval Control, Collaborative Planning and/or Lean Visual Management activities related to the works.
- 71.14. *The Supplier* shall ensure all records are completed as required by their contract and the agreed ITPs. The final ITP record package shall be checked and verified as acceptable by an appropriate member of *The Company* Project Management Team prior to final acceptance of the Subcontracted works.
- 71.15. Failure to comply with an agreed Quality or ITP process may result in reduced or delayed subcontractor payments.
- 71.16. Completed Records shall be submitted to *The Company* and retained by *The Supplier* in accordance with the contractual requirements to verify compliance with the Contract and any formal agreements with *The Company*.

APPENDIX 1 METHOD STATEMENT/WPP APPRAISAL

A	WORK PACKAGE/METHOD STATEMENT DETAILS
	Has the work been clearly defined to allow sufficient planning and risk assessment?
	Has a specific sequence of work been clearly defined in sufficient detail incl. deliveries/access to site?
	Has a detailed risk assessment been produced?
	Have all relevant risks in relation to the work been identified with suitable control measures?
	Have any risks associated with the identified <i>The Company</i> Fatal Risks been identified and adequate control measures detailed?
	Are details and signature of the assessor included on the risk assessment?
	Have health and safety roles and responsibilities of Supervisors been detailed in the document (Subcontractors) or as specified in CPP (Direct)
	Are the personnel required to complete the activities clearly identified, including supervision?
	Has the number and competence of personnel and supervisors been identified and deemed adequate for the intended works including PVMs, Slinger/Signallers etc.
	Is the type of equipment to be used identified, including any specific requirements?
	Are the materials and tools to be used identified in sufficient detail (e.g. logistics, deliveries, movement on site)?
	Have the relevant COSHH assessments been provided?
	Is the Manufacturers' information in accordance with the COSHH assessments?
	Is the standard of PPE to be worn identified, including any non-mandatory PPE?
	Have applicable drawings/sketches, etc. been identified?
	Have the requirements for any permits been identified, and details of how these will be controlled and provided?
	Are the specific Installation Inspection Check Lists and Test Certificates to be completed for the work identified?
B	SITE DETAILS
	Are there specific arrangements for the movement of personnel around site and have the on-site controls been taken into consideration with particular attention to People and Plant Interface?
	Are the details in line with the Project PVPMP/Traffic Management Plan and has consideration been given to movement around the site?
	Has loading / unloading been considered (if applicable)?
	Have the site location and layouts specific to the work at each location been identified, including details of sufficient space for plant & vehicle operations/interfaces, relevant lay down areas, storage areas and safe places?
	Are appropriate protection and isolation measures detailed (if applicable) e.g. fencing, and the responsibility for implementing and maintaining these measures?

	Have clear communication routes been identified and are contact details available for all relevant parties?
	Have all foreseeable emergencies been identified and are appropriate arrangements detailed, (e.g. working at height, fire, environmental, release of gas, etc.) including escape, evacuation and muster arrangements?
	Have interfaces with the public and other workers been considered?
	Have welfare arrangements been considered?
C	BRIEFING
	Has the document been broken down into manageable elements to assist delivery and understanding of briefings (e.g. Task Briefings, RAMS briefings)
	Is there detail on the required frequency of briefings?
	Is there detail on how, when and who will brief operatives prior to setting them to work complete with a method of acknowledging understanding?
	Has consideration been given to the correct level of detail to be included in such briefings so that information is clear and concise for operatives to understand?
	Have associated Work Instructions or any additional information included been reviewed for suitability (if applicable)?

APPENDIX 2 TRAINING REQUIREMENTS FOR WORK INVOLVING UNDERGROUND OR OVERHEAD SERVICES






Table 11 Training requirements for Major Projects and Regional Construction Works involving Underground and overhead services

Designation	All New Roads and Street Works Act Projects	Non NRSWA Service Location & Works Inside Exclusion Zone	Works outside Exclusion Zone
Utility Coordinator (Authorising Person)	NRSWA Supervisor or IOSH RD8000 and TX3	NRSWA Supervisor or IOSH RD8000 and TX3	NRSWA Supervisor or IOSH RD8000 and TX3
Excavation Supervisor (only required when >1x excavation gangs)	NRSWA – Supervisor	NRSWA – Supervisor	SMSTS
Responsible Person (Works Supervisor)	NRSWA – Supervisor CAT3+ and generator	Utility Excavations (Category 1 & 2)* or NRSWA – Operative CAT3+ and generator	SSSTS
Operatives breaking ground	NRSWA – Operative	Utility Excavations (Category 1 & 2) * or NRSWA – Operative	Relevant CSCS Card

APPENDIX 3 MINIMUM EXCLUSION ZONES FOR UNDERGROUND UTILITIES






The minimum extent of exclusion zones vary according to the type of underground utility and the Asset Owner. The Asset Owner must be contacted to confirm safety clearances and any additional requirements. The table below provides guidance on the minimum distances around underground utilities which must not be encroached by any plant or equipment.

Table 12 Exclusion Zones for SBU's (Gas & Water, Power Transmission & Distribution, Living Places, Rail)

Type of utility	Exclusion zones				
	 Air Lance & Vacuum excavator	 Hand Dig	 Powered hand tool	 Mechanical Excavation	 Piling
Telecom cable	0.0m	0.0m if Safe digging techniques applied, using insulated tools and defined in a safe method of work, otherwise 0.5m	0.5m depth	0.5m depth	1m
Low pressure water			0.5m depth	0.5m depth	1m
Low Voltage Electric Cables			0.5m	0.5m	1m
High Voltage Electric Cables			0.5m	0.5m	5m
Gas < 7bar			0.5m	0.5m	1m
Gas > 7 bar			3m*	3m*	15m*
High Pressure clean/waste water			0.5m	0.5m	1m
Heating Networks			1m	1m	1m
High Pressure fuel lines			10m	10m	30m
Fuel storage tanks			10m	10m	30m

* Subject to accurate trace by the Asset Owner

Table 13 Exclusion Zones for SBU's – UK Construction Services and Major Projects

Exclusion zones					
Type of utility	 Air Lance & Vacuum excavator	 Hand Dig	 Powered hand tool	 Mechanical Excavation	 Piling
Telecom cable	0.0m	0.0m if Safe digging techniques applied, using insulated tools and defined in a safe method of work, otherwise 0.5m	1m	1m	1m
Low pressure water			1m	1m	1m
Low Voltage Electric Cables			1m	1m	1m
High Voltage (11 & 25Kv) Electric Cables			1m	1m	5m
High Voltage (132Kv) Electric Cables			5m	5m	10m
Gas < 7bar			1m	1m	1m
Gas > 7 bar			3m*	3m*	15m*
High Pressure clean/waste water			1m	1m	1m
Heating Networks			2m	2m	5m
High Pressure fuel lines			10m	10m	30m
Fuel storage tanks			10m	10m	30m

APPENDIX 4 COMPANY MINIMUM PPE STANDARDS

The minimum PPE requirements on all Company sites are:

- Safety Helmet
- Eye Protection
- Safety Boots
- Gloves
- High visibility upper body PPE, Class 2 or above
- High Visibility Trousers, EN471 Class 1 (where mandated by SBU). Balfour Beatty Rail mandates Orange Trousers as a minimum on all projects. Balfour Beatty Living Places mandates Class 2 Yellow Trousers as a minimum on all projects

Safety Helmet Colour Scheme

The following colour scheme is applicable for safety helmets on all Company projects/sites/ facilities:



BLACK – Site Supervisors



ORANGE – Slinger/Signaller



WHITE – General Use (including sites where colour coding is impractical), Manager, Client, Competent Operative



BLUE – Inexperienced Person/Visitor

All PPE must be CE marked, compliant with the relevant European Union Directives, and comply with the relevant European Normalised (EN) standards as a minimum. See table below for further details.

Part of the body	Example PPE to use (as determined by risk/COSHH assessment)	Current EN standard
Head	Safety helmet (chin straps worn if working at height)	EN 397
Eyes	Safety glasses, safety goggles, visors, face shields	EN 166
Ears	Ear defenders or plugs	EN 352 Class 1 – Headband Class 2 – Ear plugs Class 3 – Helmet
Respiratory	Respirators or breathing apparatus	EN 136, EN 138 EN 140, EN 149
Body	High visibility jacket, coat, vest, overalls, boiler suits, disposable overalls, specialist protective clothing, wet weather coats, jackets / trousers	EN 471 (Class 2, 3) Hi-Vis EN 343 – Protection against rain
Hands / arms	Appropriate gloves	EN 388 EN 374 – Chemicals and Micro Organisms
Feet / Ankle	Safety Boots – with midsole, protective toe caps and ankle protection, wellingtons – with midsole and protective toe caps (Rigger type boots are not acceptable)	EN 20345 (Type S3)