

TSHWANE AUTOMOTIVE SPECIAL ECONOMIC ZONE

AFRICA'S FIRST AUTOMOTIVE CITY


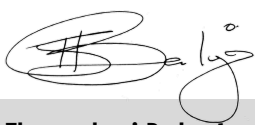
Safety, Health and Environmental Specification for
Finance, Design, Supply, Installation, Operation and
Maintenance of Solar Photovoltaic (PV) Rooftop Panels
and Battery Storage Systems at the Tshwane
Automotive Hub Special Economic Zone

Document Type	Specification
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Official Approval

It is hereby certified that:

- The Specification was developed by the SHE Manager under the guidance of the Quality Manager.
- The Specification will be reviewed as required and updated as necessary, to ensure continuous improvement.
- The implementation of this Specification will be subjected internal audits as part of the monitoring process.

Originator:	Supported By:	Approved By:
		
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Document History

Table 1: Document History

Date	Rev. No.	Originator	Status or Reason for Change
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1. Scope

This health, safety and environmental specification has been developed based on the baseline risk assessment in respect of the services that will be provided by a service provider for the Finance, Design, Supply, Installation, Operation and Maintenance of Solar Photovoltaic (PV) Rooftop Panels and Battery Storage Systems in the Zone.

The scope of the of this specification covered the following:

- 1.1. Provides the overarching framework within which the Service provider is required to demonstrate compliance with requirements of the:
 - 1.1.1 Occupational Health and Safety Act, 1993
 - 1.1.2 National Environmental Management Act, 2008
 - 1.1.3 Electricity Act, 1987
 - 1.1.4 Construction Regulations, 2014
 - 1.1.5 Compensation for Occupational Injuries and Diseases Act.
 - 1.1.6 Water Use Licenses issued for the establishment of the SEZ.
 - 1.1.7 Environmental Authorisations issued for the establishment of the Special Economic Zone.
 - 1.1.8 The approved Environmental Management Programme.
- 1.2. Establishes the way the Service provider is to manage the risk of health, safety and environmental incidents in the execution of the contract.

2. Definitions

Below are TASEZ definitions of terms. Other terms and definitions will be defined in other organisational documents as applicable.

- 2.1. Act: The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).
- 2.2. Competent person: Any person having the knowledge, training and experience specific to the work or task being performed.
- 2.3. Ergonomics: The application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimise human well-being and overall system performance.
- 2.4. Environment: Means the surroundings within which humans exist and that are made up of:
 - 2.4.1. the land. Water and atmosphere of the earth
 - 2.4.2. micro-organisms, plant and animal life:
 - 2.4.2.1. any part or combination of (i) and (ii) and the interrelationships among and between them: and

2.4.2.2. the physical. Chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

- 2.5. Hazard: A source of or exposure to danger.
- 2.6. Hazard identification: The identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed.
- 2.7. Safety Health Environmental Plan: A documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.
- 2.8. Healthy: Free from illness or injury attributable to occupational causes Occupational Health and Safety Specification for Construction Works Contracts.
- 2.9. Incident: Means an unexpected sudden occurrence including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment whether immediate or delayed.
- 2.10. Inspector: A person designated as such under section 28 the Act.
- 2.11. Major incident: An occurrence of catastrophic proportions, resulting from the use of plant or machinery, or from activities at a workplace.
- 2.12. Pollution: Any change in the environment caused by:
 - 2.12.1. Substances
 - 2.12.2. Radioactive or other waves
 - 2.12.2.1. Noise, odours, dust or heat emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future.
 - 2.12.2.2. Reasonably Practicable: practicable having regard to:
 - 2.12.2.2.1. The severity and scope of the hazard or risk concerned.
 - 2.12.2.2.2. The state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk

2.12.2.2.3. The availability and suitability of means to remove or mitigate that hazard or risk.

2.12.2.2.4. The cost of removing or mitigating that hazard or risk in relation to the benefits deriving therefrom.

2.13. Risk: The probability that injury or damage will occur

2.14. Safe: Free from any hazard

2.15. Substance: Any solid, liquid, vapour, gas or aerosol, or combination thereof

2.16. Suitable: Capable of fulfilling or having fulfilled the intended function or fit for its intended purpose

2.17. Workplace: Any premises or place where a person performs work in the course of his employment

3. Abbreviations

3.1. **ECO:** Environmental Control Officer or TASEZ designated person responsible for environmental management at TASEZ.

3.2. **EMPr:** Environmental Management Programme

3.3. **HIRA:** Hazard Identification and Risk Assessment

3.4. **MSDS:** Material Safety Data Sheet

3.5. **SANS:** South African National Standard

3.6. **SEZ:** Special Economic Zone

3.7. **SHE:** Safety, Health and Environment

4. Leadership

4.1. The service provider shall prepare and submit an environmental, health and safety policy signed by the organisation's CEO, or any person assigned by the CEO who has authoring to sign the policy. The Policy shall:

2.17.1. Be appropriate to the nature, scale, safety and health risks and environmental impacts of the service provider's activities, products and services.

2.17.2. Include the commitment to provide a safe working conditions for the prevention of work-related injury and ill health and must be appropriate to the purpose, size and context of the services provider's organisation and must be specific to the nature of the health and safety risks and the health and safety opportunities associated with the project.

2.17.3. Include commitment the protection of the environment, including the prevention.

2.17.4. Include commitment to fulfil legal obligations.

2.17.5. Include commitment to continual improvement of the Safety, Health and Environmental Plan that will be submitted by the service provider in response to this SHE Specification.

4.2. The policy shall be maintained as documented information, communicated to all affected stakeholders and be made available to interested parties.

5. Roles, Responsibilities and Authorities

5.1. The service provider shall be responsible for ensuring that the responsibilities and authorities within its organisation are assigned and communicated at all levels with its organisation and maintained as documented information.

5.2. Top management shall assign the responsibility and authority for ensuring that the SHE Plan developed in response to this Specification conforms to the requirements of this Specification and report on the performance of the SHE Plan to TASEZ.

5.3. The Service Provider shall ensure that duties of an employer as contemplated in section 8 of the Act are carried out and that all applicable legal appointments are done in writing.

5.4. Duties of a client section 5, Construction Regulations, 2014

5.4.1. The Service Provider shall submit all its legal appointments and legal appointment structure as specified in the Act and the Construction Regulations, 2014. The Service Provider shall fulfil of the duties assigned to a Clients as contemplated in section 5 of the Construction Regulations. All appointments shall be made in writing.

5.4.2. The Service Provider shall be responsible for applying for the Construction Work Permit as contemplate in section 3 (1) of the Construction Regulations, 2014, without derogating from his or her health and safety responsibilities or liabilities, the Service Provider shall appoint a competent person in writing as an agent to act as his or her representative, and where such an appointment is made the duties that are imposed by the Construction Regulations, 2014 upon a client, apply as far as reasonably practicable to the agent so appointed.

5.5. Roles and Responsibilities of a Health and Safety Agent

The Service Provider shall appoint a Health and Safety Agent, the Health Safety Agent must:

- 5.5.1. Manage the health and safety on the construction site,
- 5.5.2. Be registered with the South African Council for the Project and Construction Management Professions.
- 5.5.3. Prepare a baseline risk assessment for an intended construction work project;
- 5.5.4. Prepare a suitable, sufficiently documented and coherent site-specific health and safety specification for the intended construction work based on the baseline risk assessment contemplated in paragraph 5.4.3;
- 5.5.5. Provide the designer with the health and safety specification contemplated in paragraph 5.4.4 and ensure that the designer takes the prepared health and safety specification into consideration during the design stage;
- 5.5.6. Ensure that the designer carries out all responsibilities contemplated in section 6 of the Construction Regulations 2014;
- 5.5.7. Include the health and safety specification in the tender documents;
- 5.5.8. Ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures;
- 5.5.9. Ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely;
- 5.5.10. Take reasonable steps to ensure co-operation between all contractors appointed by the client to enable each of those contractors to comply with Construction Regulations, 2014;
- 5.5.11. Ensure before any work commences on a site that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
- 5.5.12. Appoint every principal contractor in writing for the project or part thereof on the construction site;
- 5.5.13. Discuss and negotiate with the principal contractor the contents of the principal contractor's health and safety plan contemplated in regulation 7 (1), and must thereafter finally approve that plan for implementation;
- 5.5.14. Ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor;
- 5.5.15. Take reasonable steps to ensure that each contractor's health and safety plan contemplated in regulation 7 (1) (a) is implemented and maintained;

- 5.5.16. Ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
 - 5.5.17. Ensure that a copy of the health and safety audit report contemplated in paragraph 5.4.17 is provided to the principal contractor within seven days after the audit;
 - 5.5.18. Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site;
 - 5.5.19. Where changes are brought about to the design or construction work, ensure that make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely; and ensure that the health and safety file contemplated in regulation 7 (1) (b) of the Construction Regulations, 2014 is kept and maintained by the principal contractor.
 - 5.5.20. Where a client requires additional work to be performed as a result of a design change or an error in construction due to the actions of the client, the client must ensure that sufficient safety information and appropriate additional resources are available to execute the required work safely.
 - 5.5.21. Where a fatality or permanent disabling injury occurs on a construction site, the client must ensure that the contractor provides the provincial director with a report contemplated in section 24 of the Act, in accordance with regulations 8 and 9 of the General Administrative Regulations, 2013, and that the report includes the measures that the contractor intends to implement to ensure a safe construction site as far as is reasonably practicable.
 - 5.5.22. Where more than one principal contractor is appointed ensure that the Service Provider takes reasonable steps to ensure co-operation between all principal contractors and contractors in order to ensure compliance with the Construction Regulations, 2014.
- 5.6. Roles and responsibilities of an Environmental Control Officer
- The Service Provider shall appoint an Independent Environmental Control Officer. The Environmental Officer shall be responsible for:
- 5.6.1. Overseeing the development activities;

5.6.2. Provide advise in terms of compliance with the conditions of the Environmental Authorisation issued for the establishment.

5.6.3. Submit compliance report at least once during the preparation and construction phase of the construction.

5.7. Roles and Responsibilities of a Designer

The Service Provider shall appoint a Structural Designer, the Structural Designer shall be responsible for:

5.7.1. Ensuring that the applicable safety standards incorporated into these Regulations under section 44 of the Act are complied with in the design;

5.7.2. Take into consideration the health and safety specification submitted by the client

5.7.3. Before the contract is put out to tender, make available in a report to the client all relevant health and safety information about the design of the relevant structure that may affect the pricing of the construction work;

5.7.4. The geotechnical-science aspects, where appropriate; and

2.17.5.1. The loading that the structure is designed to withstand;

2.17.5.2. Inform the client in writing of any known or anticipated dangers or hazards relating to the construction work, and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered;

2.17.5.3. refrain from including anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons, which can be avoided by modifying the design or by substituting materials;

5.7.5. Take into account the hazards relating to any subsequent maintenance of the relevant structure and must make provision in the design for that work to be performed to minimize the risk;

5.7.6. When mandated by the client to do so, carry out the necessary inspections at appropriate stages to verify that the construction of the relevant structure is carried out in accordance with his design: Provided that if the designer is not so mandated, the client's appointed agent in this regard is responsible to carry out such inspections;

- 5.7.7. When mandated as contemplated in paragraph 3.3.6, stop any contractor from executing any construction work which is not in accordance with the relevant design's health and safety aspects: Provided that if the designer is not so mandated, the client's appointed agent in that regard must stop that contractor from executing that construction work;
 - 5.7.8. When mandated as contemplated in paragraph 3.3.6, in his or her final inspection of the completed structure in accordance with the National Building Regulations, include the health and safety aspects of the structure as far as reasonably practicable, declare the structure safe for use, and issue a completion certificate to the client and a copy thereof to the contractor; and
 - 5.7.9. During the design stage, take cognisance of ergonomic design principles in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.
- 5.8. Roles and responsibilities of Temporary Works Designer
- If the Service Provider appoints a designer of temporary works the designer of temporary works must ensure that:
- 5.8.1. All temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
 - 5.8.2. The designs of temporary works are done with close reference to the structural design drawings issued by the contractor, and in the event of any uncertainty consult the contractor;
 - 5.8.3. All drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and the loads caused by the temporary works and any imposed loads are clearly indicated in the design.
- 5.9. Roles and responsibilities of Principal Contractors
- The Service Provider shall ensure that Principal Contractors must:

- 5.9.1. Provide and demonstrate to the client a suitable, sufficiently documented and coherent site specific health and safety plan, based on the client's documented health and safety specifications contemplated in regulation which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the principal contractor as work progresses;
- 5.9.2. Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and the Construction Regulations, 2014, which must be made available on request to an inspector, TASEZ, the client, the client's agent or a contractor; and on appointing any other contractor, in order to ensure compliance with the provisions of the Act.
- 5.9.3. Provide contractors who are tendering to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications contemplated in section 5(1)(b) of the Construction Regulations pertaining to the construction work which has to be performed;
- 5.9.4. Ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
- 5.9.5. Ensure that no contractor is appointed to perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
- 5.9.6. Ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
- 5.9.7. Appoint each contractor in writing for the part of the project on the construction site; take reasonable steps to ensure that each contractor's health and safety plan contemplate is implemented and maintained on the construction site;

- 5.9.8. Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
- 5.9.9. Stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
- 5.9.10. Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and discuss and negotiate with the contractor the contents of the health and safety plan contemplated and must thereafter finally approve that plan for implementation;
- 5.9.11. Ensure that a copy of his or her health and safety plan, as well as the contractor's health and safety plan, is available on request to an employee, an inspector, a contractor, the client or the client's agent;
- 5.9.12. Hand over a consolidated health and safe file to the client upon completion of the construction work and must, in include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- 5.9.13. In addition to the documentation required in the health and safety file include and make available a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done; and ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 provided in the Construction Regulations, 2014.
- 5.9.14. A principal contractor must take reasonable steps to ensure co-operation between all contractors appointed by the principal contractor to enable each of those contractors to comply with the Construction Regulations 2014.
- 5.10. Roles and responsibilities of Contractors
 - A contractor must prior to performing any construction work:

- 5.10.1. Provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification and provided by the principal which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;
- 5.10.2. Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the client, the client's agent or the principal contractor; before appointing another contractor to
- 5.10.3. Perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- 5.10.4. Co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the act; and
- 5.10.5. As far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.
- 5.10.6. Where a contractor appoints another contractor to perform construction work, the duties determined in paragraph 3.7 that apply to the principal contractor apply to the contractor as if he or she were the principal contractor.
- 5.10.7. No contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.
- 5.10.8. A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

5.10.9. A contractor must at all times keep on his or her construction site records of the health and safety induction training and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor.

5.10.10. A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 as contemplated in the Construction Regulations, 2014.

6. Communication and Participation of Workers

The service provider shall convene health and safety meetings whenever more than two health and safety representatives have been appointed for the site. These meetings shall be attended by all health and safety representatives and persons nominated by the Contractor. Such meetings shall be convened at least once every month to:

- 6.1. make recommendations to the Service Provider regarding any matter affecting the health or safety of persons on the site; and
- 6.2. discuss any incident on the site in which or in consequence of which any person was injured, became ill or died.
- 6.3. The service providers shall consult with the health and safety committee on the development, monitoring and review of the risk assessment.
- 6.4. The service providers shall ensure that minutes of the health and safety committee meetings are kept.

7. Management and Supervision of Construction Work

- 7.1. A principal contractor must in writing appoint one full-time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate must be appointed by the principal contractor.
- 7.2. A principal contractor must upon having considered the size of the project, in writing appoint one or more assistant construction managers for different sections thereof: Provided that the designation of any such person does not relieve the construction manager of any personal accountability for failing in his or her management duties in terms of this regulation.

- 7.3. Where the construction manager has not appointed assistant construction managers, or, in the opinion of an inspector, a sufficient number of such assistant construction managers have not been appointed, that inspector must direct the construction manager in writing to appoint the number of assistant construction managers indicated by the inspector, and those assistant construction managers must be regarded as having been appointed.
- 7.4. No construction manager appointed under may manage any construction work on or in any construction site other than the site in respect of which he or she has been appointed.
- 7.5. A contractor must, after consultation with the client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site: Provided that, where the question arises as to whether a construction health and safety officer is necessary, the decision of an inspector is decisive.
- 7.6. No contractor may appoint a construction health and safety officer to assist in the control of health and safety related aspects on the site unless he or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with SACPCMP and has necessary competencies and resources to assist the contractor.
- 7.7. A construction manager must in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site.
- 7.8. A contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the construction supervisor contemplate, and every such employee has, to the extent clearly defined by the contractor in the letter of appointment, the same duties as the construction supervisor: Provided that the designation of any such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties in terms of this regulation.

- 7.9. Where the contractor has not appointed an employee as contemplated in paragraph 5.8, or, in the opinion of an inspector, a sufficient number of such employees have not been appointed, that inspector must instruct the employer to appoint the number of employees indicated by the inspector, and those employees must be regarded as having been appointed.
- 7.10. No construction supervisor may supervise any construction work on or in any construction site other than the site in respect of which he or she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed construction supervisor may supervise more than one site.

8. Risk Assessment

- 8.1. A contractor must, before the commencement of any construction work and during such construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site, and must include:
- 8.1.1. the identification of the risks and hazards to which persons may be exposed to.
 - 8.1.2. an analysis and evaluation of the risks and hazards identified based on a documented method;
 - 8.1.3. a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified
 - 8.1.4. a monitoring plan; and a review plan
- 8.2. A contractor must ensure that as far as is reasonably practicable, ergonomic related hazards are analyzed, evaluated and addressed in a risk assessment.
- 8.3. A contractor must ensure that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site.
- 8.4. A principal contractor must ensure that all contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site.

- 8.5. A contractor must consult with the health and safety committee or, if no health and safety committee exists, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site.
- 8.6. A contractor must ensure that copies of the risk assessments of the relevant site are available on site for inspection by an inspector, the client, the client's agent, any contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee.
- 8.7. A contractor must review the relevant risk assessment-
 - 8.7.1. where changes are effected to the design and or construction that result in a change to the risk profile;
 - 8.7.2. or when an incident has occurred.

9. Fall Protection

A contractor must:

- 9.1. Designate a competent person to be responsible for the preparation of a fall protection plan;
- 9.2. Ensure that the fall protection plan contemplated is implemented, amended where and when necessary and maintained as required; and
- 9.3. Take steps to ensure continued adherence to the fall protection plan.
- 9.4. The fall protection plan contemplated must include:
 - 9.4.1. a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
 - 9.4.2. the processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
 - 9.4.3. a programme for the training of employees working from a fall risk position and the records thereof;
 - 9.4.4. the procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
 - 9.4.5. a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

- 9.5. A contractor must ensure that a construction manager appointed section 8 (1) of the Construction Regulations is in possession of the most recently updated version of the fall protection plan.
- 9.6. A contractor must ensure that:
 - 9.6.1. all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
 - 9.6.2. no person is required to work in a fall risk position, unless such work is performed safely;
 - 9.6.3. fall prevention and fall arrest equipment are approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and
 - 9.6.4. securely attached to a structure or plant, and the structure or plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
 - 9.6.5. fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.
- 9.7. Where roof work is being performed on a construction site, the contractor must ensure that, in addition to the requirements set out in paragraph 7.4 and 7.6 it is indicated in the fall protection plan that:
 - 9.7.1. the roof work has been properly planned;
 - 9.7.2. the roof erectors are competent to carry out the work;
 - 9.7.3. no employee is permitted to work on roofs during inclement weather conditions or if any conditions are hazardous to the health and safety of the employee;
 - 9.7.4. all covers to openings and fragile material are of sufficient strength to withstand any imposed loads;
 - 9.7.5. suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and

- 9.7.6. suitable and sufficient guard-rails, barriers and toe-boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment.

10. Structures

- 10.1. A contractor must ensure that:
 - 10.1.1. All reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
 - 10.1.2. No structure or part of a structure is loaded in a manner which would render it unsafe; and
 - 10.1.3. All drawings pertaining to the design of the relevant structure are kept on site and are available on request to an inspector, other contractors, the client and the client's agent or employee.
- 10.2. An owner of a structure must ensure that:
 - 10.2.1. Inspections of that structure are carried out periodically by competent persons in order to render the structure safe for continued use;
 - 10.2.2. That the inspections contemplated in paragraph 8.2.1 are carried out at least once every six months for the first two years and thereafter yearly;
 - 10.2.3. The structure is maintained in such a manner that it remains safe for continued use;
 - 10.2.4. The records of inspections and maintenance are kept and made available on request to an inspector.

11. Temporary Works

- 11.1. A contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use.
- 11.2. A contractor must ensure that all temporary works operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose.
- 11.3. A contractor must ensure that:

- 11.3.1. all temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they are capable of supporting all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand;
- 11.3.2. all temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exists the structural designer should be consulted;
- 11.3.3. detailed activity specific drawings pertaining to the design of temporary works structures are kept on the site and are available on request to an inspector, other contractors, the client, the client's agent or any employee;
- 11.3.4. all persons required to erect, move or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely;
- 11.3.5. all equipment used in temporary works structure are carefully examined and checked for suitability by a competent person, before being used;
- 11.3.6. all temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other imposed load and at least on a daily basis until the temporary works structure has been removed and the results have been recorded in a register and made available on site;
- 11.3.7. no person may cast concrete, until authorization in writing has been given by the competent person contemplated in paragraph 9.1.
- 11.3.8. if, after erection, any temporary works structure is found to be damaged or weakened to such a degree that its integrity is affected, it is safely removed or reinforced immediately; adequate precautionary measures are taken in order to:
 - 11.3.8.1. secure any deck panels against displacement; and
 - 11.3.8.2. prevent any person from slipping on temporary works due to the application of release agents; as far as is reasonably practicable, the health of any person is not affected through the use of solvents or oils or any other similar substances;

- 11.3.9. upon casting concrete, the temporary works structure is left in place until the concrete has acquired sufficient strength to safely support its own weight and any imposed load, and is not removed until authorisation in writing has been given by the competent person contemplated in paragraph 9.1;
- 11.3.10. the foundation conditions are suitable to withstand the loads caused by the temporary works structure and any imposed load in accordance with the temporary works design.
- 11.3.11. provision is made for safe access by means of secured ladders or staircases for all work to be carried out above the foundation bearing level;
- 11.3.12. a temporary works drawing or any other relevant document includes construction sequences and methods statements;
- 11.3.13. the temporary works designer has been issued with the latest revision of any relevant structural design drawing;
- 11.3.14. a temporary works design and drawing is used only for its intended purpose and for a specific portion of a construction site; and
- 11.3.15. the temporary works drawings are approved by the temporary works designer before the
- 11.3.16. erection of any temporary works.
- 11.4. No contractor may use a temporary works design and drawing for any work other than its intended purpose.

12. Scaffolding

- 12.1. A contractor must appoint a competent person in writing who must ensure that all scaffolding work operations are carried out under his or her supervision and that all scaffold erectors, team leaders and inspectors are competent to carry out their work.
- 12.2. A contractor using access scaffolding must ensure that such scaffolding, when in use, complies with the safety standards incorporated for the purpose contemplated into the Construction Regulations, 2014 under section 44 of the Act.

13. Material Hoists

- 13.1. A contractor must ensure that every material hoist and its tower have been constructed in accordance with the generally accepted technical standards and are strong enough and free from defects.
- 13.2. A contractor must ensure that the tower of every material hoist is:
 - 13.2.1. erected on firm foundations and secured to the structure or braced by steel wire guy ropes, and extends to a distance above the highest landing to allow a clear and unobstructed space of at least 900 millimetres for over travel;
 - 13.2.2. enclosed on all sides at the bottom, and at all floors where persons are at risk of being struck by moving parts of the hoist, except on the side or sides giving access to the material hoist, with walls or other effective means to a height of at least 2100 millimetres from the ground or floor level; and
 - 13.2.3. provided with a door or gate at least 2100 millimetres in height at each landing, and that door or gate must be kept closed except when the platform is at rest at such a landing.
- 13.3. A contractor must cause:
 - 13.3.1. the platform of every material hoist to be designed in a manner that it safely contains the loads being conveyed and that the combined mass of the platform and the load does not exceed the designed lifting capacity of the hoist;
 - 13.3.2. the hoisting rope of every material hoist which has a remote winch to be effectively protected from damage by any external cause to the portion of the hoisting rope between the winch and the tower of the hoist; and
 - 13.3.3. every material hoist to be provided with an efficient brake capable of holding the platform with its maximum load in any position when power is not being supplied to the hoisting machinery.
- 13.4. No contractor may require or permit trucks, barrows or material to be conveyed on the platform of a material hoist and no person may so convey trucks, barrows or material unless those articles are secured or contained in a manner that displacement thereof cannot take place during movement.

- 13.5. A contractor must cause a notice, indicating the maximum mass load which may be carried at any one time and the prohibition of persons from riding on the platform of the material hoist, to be affixed around the base of the tower and at each landing.
- 13.6. A contractor of a material hoist may not require or permit any person to operate a hoist, unless the person is competent in the operation of that hoist.
- 13.7. No contractor may require or permit any person to ride on a material hoist.
- 13.8. A contractor must ensure that every material hoist:
 - 13.8.1. is inspected on daily basis by a competent person appointed in writing by the contractor and such competent person must have the experience pertaining to the erection and maintenance of material hoists or similar machinery;
 - 13.8.2. inspection contemplated in paragraph 11.8.1 includes the determination of the serviceability of the entire material hoist, including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices;
 - 13.8.3. inspection results are entered and signed in a record book by a competent person, which book must be kept on the premises for that purpose;
 - 13.8.4. is properly maintained and the maintenance records in this regard are kept on site.

14. Cranes

- 14.1. A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used:
 - 14.1.1. They are designed and erected under the supervision of a competent person;
 - 14.1.2. A relevant risk assessment and method statement are developed and applied;
 - 14.1.3. The effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
 - 14.1.4. The bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;

- 14.1.5. The tower crane operators are competent to carry out the work safely;
and
- 14.1.6. The tower crane operators have a medical certificate of fitness to work
in such an environment, issued by an occupational health practitioner in
the form of annexure 3 contemplated in the construction regulations 20.

15. Construction Vehicles and Mobile Plant

- 15.1. A contractor must ensure that all construction vehicles and mobile plant:
 - 15.1.1. are of an acceptable design and construction;
 - 15.1.2. are maintained in a good working order;
 - 15.1.3. are used in accordance with their design and the intention for which
they were designed, having due regard to safety and health;
 - 15.1.4. are operated by a person who has received appropriate training, is
certified competent and in possession of proof of competency and is
authorised in writing to operate those construction vehicles and mobile
plant;
 - 15.1.5. has a medical certificate of fitness to operate those construction vehicles
and mobile plant, issued by an occupational health practitioner in the
form of Annexure 3 as contemplated in the Construction Regulations,
2014;
 - 15.1.6. have safe and suitable means of access and egress;
 - 15.1.7. are properly organized and controlled in any work situation by providing
adequate signalling or other control arrangements to guard against the
dangers relating to the movement of vehicles and plant, in order to
ensure their continued safe operation;
 - 15.1.8. are prevented from falling into excavations, water or any other area
lower than the working surface by installing adequate edge protection,
which may include guardrails and crash barriers;
 - 15.1.9. are fitted with structures designed to protect the operator from falling
material or from being crushed should the vehicle or mobile plant
overturn;
 - 15.1.10. are equipped with an acoustic warning device which can be activated
by the operator;
 - 15.1.11. are equipped with an automatic acoustic reversing alarm; and

15.1.12. are inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the finding of such inspection are recorded in a register kept in the construction vehicle or mobile plant.

15.2. (2) A contractor must ensure that:

15.2.1. no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;

15.2.2. every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;

15.2.3. the traffic routes are suitable for the persons, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;

15.2.4. every traffic route is, where necessary, indicated by suitable signs;

15.2.5. all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress, have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant; all construction vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set and ignition secured;

15.2.6. whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;

15.2.7. tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;

15.2.8. vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and

15.2.9. all construction vehicles or mobile plant traveling, working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

16. Use and Temporary Storage of Flammable Liquids

A contractor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2003, ensure that:

- 16.1. Where flammable liquids are being used, applied or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- 16.2. No person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- 16.3. An adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- 16.4. Only the quantity of flammable liquid needed for work on one day is taken out of the store for use;
- 16.5. All containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, are removed from the construction site and safely disposed of;
- 16.6. Where flammable liquids are decanted, the metal containers are bonded and earthed; and
- 16.7. No flammable material, including cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.

17. Demolition Work

- 17.1. A contractor must appoint a competent person in writing to supervise and control all demolition work on site.
- 17.2. A contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed by that person.
- 17.3. During a demolition, the competent person must check the structural integrity of the structure at intervals determined in the method statement in order to avoid any premature collapses.
- 17.4. A contractor who performs demolition work must with regard to a structure being demolished, take steps to ensure that:

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- 17.4.1. no floor, roof or other part of the structure is overloaded with debris or material in a manner which would render it unsafe;
 - 17.4.2. all reasonably practicable precautions are taken to avoid the danger of the structure collapsing when any part of the framing of a framed or partly framed building is removed, or when reinforced concrete is cut; and
 - 17.4.3. precautions are taken in the form of adequate shoring or other means that may be necessary to prevent the accidental collapse of any part of the structure or adjoining structure;
 - 17.5. ensure that no person works under overhanging material or a structure which has not been adequately supported, shored or braced;
 - 17.6. ensure that any support, shoring or bracing contemplated in paragraph (b), is designed and constructed so that it is strong enough to support the overhanging material; where the stability of an adjoining building, structure or road is likely to be affected by demolition work on a structure, take steps to ensure the stability of such structure or road and the safety of persons;
 - 17.7. ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of demolition work that may affect any such service, take the steps that are necessary to render circumstances safe for all persons involved;
 - 17.8. cause every stairwell used and every floor where work is being performed in a building being demolished, to be adequately illuminated by either natural or artificial means;
 - 17.9. cause convenient and safe means of access to be provided to every part of the demolition site in which persons are required to work; and
 - 17.10. erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe where there is a danger or possibility of persons being struck by falling objects.
 - 17.11. A contractor must ensure that no material is dropped to any point, which falls outside the exterior walls of the structure, unless the area is effectively protected.
 - 17.12. No person may dispose of waste and debris from a high place by a chute unless the chute:
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- 17.12.1. is adequately constructed and rigidly fastened;
- 17.12.2. if inclined at an angle of more than 45 degrees to the horizontal, is enclosed on its four sides;
- 17.12.3. if of the open type, is inclined at an angle of less than 45 degrees to the horizontal;
- 17.12.4. where necessary, is fitted with a gate at the bottom end to control the flow of material; and
- 17.12.5. discharges into a container or an enclosed area surrounded by barriers.
- 17.13. A contractor must ensure that every chute used to dispose of rubble is designed in such a manner that rubble does not free-fall and that the chute is strong enough to withstand the force of the debris travelling along the chute.
- 17.14. A contractor must ensure that no equipment is used on floors or working surfaces, unless such floors or surfaces are of sufficient strength to support the imposed loads.
- 17.15. Where a risk assessment indicates the presence of asbestos, a contractor must ensure that all asbestos related work is conducted in accordance with the Asbestos Regulations, 2001.
- 17.16. Where a risk assessment indicates the presence of lead, a contractor must ensure that all lead related work is conducted in accordance with the Lead Regulations, 2001.
- 17.17. Where the demolition work involves the use of explosives, a method statement must be developed in accordance with the applicable explosives legislation, by an appointed person who is competent in the use of explosives for demolition work and all persons involved in the demolition works must adhere to demolition procedures issued by the appointed person.
- 17.18. A contractor must ensure that all waste and debris are as soon as reasonably practicable removed and disposed of from the site in accordance with the applicable legislation.

18. Electrical Installations and Machinery

- 18.1. A contractor must, in addition to compliance with the Electrical Installation Regulations, 2009, and the Electrical Machinery Regulations, 1988, ensure that:

- 18.1.1. Before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- 18.1.2. All parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- 18.1.3. The control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- 18.1.4. All temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- 18.1.5. All electrical machinery is inspected by the authorised operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

19. Housekeeping and General Safeguarding

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, promulgated ensure that suitable housekeeping is continuously implemented on each construction site, including:

- 19.1. The proper storage of materials and equipment;
- 19.2. The removal of scrap, waste and debris at appropriate intervals;
- 19.3. Ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- 19.4. Ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- 19.5. Ensuring that waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out in section 14 (6) of Construction Regulation, 2014;
- 19.6. Ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and

- 19.7. Ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

20. Stacking and Storage

A contractor must, in addition to compliance with the provisions for the stacking of articles in the General Safety Regulations, 2003, ensure that:

- 20.1. A competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- 20.2. Adequate storage areas are provided;
- 20.3. There are demarcated storage areas; and storage areas are kept neat and under control.

21. Fire Precautions

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, ensure that:

- 21.1. All appropriate measures are taken to avoid the risk of fire;
- 21.2. Sufficient and suitable storage is provided for flammable liquids, solids and gases;
- 21.3. Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- 21.4. In confined spaces and other places in which flammable gases, vapours or dust can cause danger:
 - 21.4.1. Only suitably protected electrical installations and equipment, including portable lights, are used;
 - 21.4.2. There are no flames or similar means of ignition;
 - 21.4.3. There are conspicuous notices prohibiting smoking;
 - 21.4.4. Oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
 - 21.4.5. Adequate ventilation is provided;
- 21.5. Combustible materials do not accumulate on the construction site;
- 21.6. Welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;

- 21.7. Suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- 21.8. The fire equipment contemplated is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
- 21.9. A sufficient number of workers are trained in the use of fire- extinguishing equipment;
- 21.10. Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- 21.11. The means of escape is kept clear at all times;
- 21.12. There is an effective evacuation plan providing for all persons to be evacuated speedily without panic
- 21.13. Persons to be accounted for; and plant and processes to be shut down; and
- 21.14. A siren is installed and sounded in the event of a fire.

22. Worker Facilities

- 22.1. A contractor must, must provide worker facilities as contemplated in the Facilities Regulations, 2004, provide at, or within reasonable access of every employee, the following:
 - 22.1.1. Clean, hygienic and maintained facilities
 - 22.1.2. Shower facilities after consultation with the employees or employees representatives, or at least one shower facility for every 15 persons;
 - 22.1.3. At least one sanitary facility for each sex an for every 30 workers;
 - 22.1.4. Changing facilities for each sex; and
 - 22.1.5. Sheltered eating areas
- 22.2. A contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

23. Creating and Maintaining a Safe and Healthy Work Environment

23.1. General

The service providers shall with respect to the site and the works that are contemplated:

- 23.1.1. Cause a preliminary hazard identification to be performed by a competent person before commencing any physical activity;
- 23.1.2. Evaluate the risks associated with such work constituting a hazard to the health and safety of such employees and the steps that need to be taken to comply with the Act; and
- 23.1.3. As far as is reasonably practicable, prevent the exposure of such employees to the hazards concerned or, where prevention is not reasonably practicable, minimize such exposure.
- 23.1.4. Ensure that no structure or part of a structure is loaded in a manner which would render it unsafe.

23.2. Registration With The Compensation Fund

The service provider shall be registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);

23.3. Medical Fitness

The service provider must ensure that all his or her employees have a valid medical certificate of fitness specific to the work to be performed and issued by an occupational health practitioner.

23.4. Personal Protective Equipment and Clothing

The Service provider shall ensure that:

- 23.4.1. All workers are issued with the necessary personal protective clothing;
- 23.4.2. All workers are identifiable at all times by having the company for which they work for printed on the back or front of their overalls; and
- 23.4.3. Clear procedures are in place for the replacement of lost, stolen, worn or damage personal protective clothing.

23.5. Management of Principal Contractors, Contractors and Sub-Contractors

The Service provider may only subcontract work in terms of a written subcontract and shall only appoint a subcontractor should he be reasonably satisfied that such a subcontractor has the necessary competencies and resources to safely perform the work falling within the scope of the contract. Such a subcontract shall require that the subcontractor to:

- 23.5.1. Co-operate with the subcontractors far as is necessary to enable both the Service provider and sub-service provider to comply with the provisions of the Act;
- 23.5.2. As far as is reasonably practicable, promptly provide the subcontractor with any information which might affect the health and safety of any person at work carrying out work or any person who might be affected by the work of such a person at work or which might justify a review of the SHE Plan;
- 23.5.3. The Service provider shall provide any sub-service provider who is submitting a tender or appointed to perform a sub-contract falling within the scope of the contract, with the relevant sections of this specification and any work specific information which might be pertinent to the sub-contract;
- 23.5.4. The Service provider shall take reasonable steps as are necessary to ensure:
 - 23.5.4.1. Co-operation between all subcontractor to enable each of those subservice providers to comply with the requirements of the Act and associated regulations; and
 - 23.5.4.2. That each sub-contractor's health and safety plan is implemented.
- 23.5.5. The Service provider shall conduct periodic audits for compliance with the approve SHE Plan of each and every sub-service provider working on the site at intervals agreed upon with such subcontractors, but at least once per month.
- 23.5.6. The Service providers shall stop any subcontractor from executing construction work which is not in accordance with the Contractor's or subcontractor' SHE Plan for the site or which poses a threat to the health and safety of persons.
- 23.5.7. The Service provider shall ensure that where changes to the works occur, sufficient health and safety information and appropriate resources are made available to subcontractor to execute the work safely.
- 23.5.8. The Service provider shall ensure that:

- 23.5.8.1. Every subcontractor registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site;
- 23.5.8.2. Potential subcontractors submitting tenders have made provision for the cost of health and safety measures during the construction process; and
- 23.5.8.3. Every subcontractor has in place a documented health and safety plan prior to commencing any work on site which falls within the scope of the contract.
- 23.5.9. The service providers shall receive, discuss and approve health and safety plans submitted by subcontractors.
- 23.5.10. The service provider shall ensure that all subcontractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.
- 23.5.11. The service provider shall reasonably satisfy himself that all employees of subcontractors are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.
- 23.5.12. The Service providers shall satisfy himself that ensure that all subcontractor employees deployed in the site are:
 - 23.5.12.1. Informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and
 - 23.5.12.2. Issued with proof of health and safety induction training issued by a competent person and carry proof such induction when working on site.

24. Management of Change

- 24.1. The service provider shall not make any changes to the approved SHE Plan without consulting TASEZ.

- 24.2. Where changes are brought about to the scope of the work, TASEZ will make available sufficient health and safety information and appropriate resources to the service provider to execute the work safely.

25. Environmental Management Activities

- 25.1. The service provider shall comply with the site's Environmental Management Programme, The Environmental Authorisations and the Water Use Licenses which shall be provided to the service provider upon appointment.
- 25.2. All waste streams to be generated during construction must be managed in accordance with the hierarchy of waste management principles and disposed at an authorised landfill site must be the last option. Proof of disposal must be kept on site and made available to TASEZ and Environmental Management Inspectors upon request.
- 25.3. Noise generated for the construction activities must not exceed the recommended level of 85Db as required by the Noise Induced Hearing Loss Regulations, 2003.

26. SHE File Implementation and Maintenance

The Service Provider's Health and Safety Policy must be signed by the Chief Executive Officer and should outline the Contractor's objectives and how they will be achieved and implemented:

- 26.1. The Service provider shall submit an organogram, prior to commencement of the work, outlining the Health and Safety Site Team that will be assigned to the project. The organogram shall be updated, when there is a change in the site team.
- 26.2. Copies of certificates of registered personnel responsible for critical operations must be attached in the SHE File;
- 26.3. Proof of all Sub-Contractor's induction training whenever it is conducted;
- 26.4. Copies of the minutes of the Sub-Contractor's health and safety meeting;
- 26.5. Copies of each of the Subcontractor' SHE Policy, signed by the Chief Executive Officer, which outlines the Contractor's objectives and how they will be achieved and implemented;
- 26.6. The SHE Plans of all the Subcontractor;
- 26.7. A comprehensive and updated list of all the Subcontractor employed on site by the Contractor, indicating the type of work being performed by such Subcontractor;

- 26.8. The outcomes of the monthly audits for compliance with the approved SHE Plans of each and every Sub-Service provider working on the site;
- 26.9. Any report made to an Inspector by the health and safety committee;
- 26.10. The minutes of all health and safety meetings and any recommendations made to the Service provider by the health and safety committee;
- 26.11. The findings of all audit reports made regarding the implementation of the Contractor's or a Sub-Contractor's SHE Plan;
- 26.12. Details of induction training conducted whenever it is conducted including the list of attendees;
- 26.13. The Service provider shall hand over the SHE File to the SHE Manager upon completion of the contract and if relevant, a certificate of compliance accompanied by a test report for the electrical installation in accordance with the provisions of the Electrical Installation Regulations.

Note:

The service provider must complete **Annexure B** SHE Plan Checklist with the SHE File.

27. Approval of the SHE Plan

- 27.1. The Service Provider's SHE Plan will be subject to approval by TASEZ, or amendment, if necessary, before commencement of work. The Service provider will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained TASEZ's written approval of his SHE Plan.
- 27.2. Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his SHE Plan, shall not be used as a reason to claim for extension of time or standing time and related costs.
- 27.3. The Service provider shall demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and its Regulations.

Note:

The Service provider shall consistently demonstrate his competence and adequacy of resources to perform the duties imposed on the Service provider in terms of this Specification, the Act and the Construction Regulations.

28. Mandatory agreement in term of Section 37(2) of the Act

- 28.1. The annexures to the Contract Document contain a "Mandatory Form of Authority and Agreement in terms of Section 37(2) of the Act which agreement shall be entered into and duly signed by both the TASEZ and Service provider prior to commencement with work. A copy of the signed agreement shall be included in the Service Provider's SHE Plan.
- 28.2. Any acceptance, approval, check, certificate, consent, examination, inspection, instruction, notice, observation, proposal, request, test or similar act by either the Employer, any of his agents or the Engineer (including absence of disapproval) shall not relieve the Service provider from any responsibility he has under the Contract, the Act and the Construction Regulations, including responsibility for errors, omissions, discrepancies and non-compliances.

29. Incident Management

- 29.1. The Service provider shall report any health, safety and environmental incident in accordance with section 24 of the Act and section 30(3) of the NEMA to the applicable authorities and shall report the occurrence of such an incident to TASEZ as soon as reasonably practicable.
- 29.1.1. The Service provider and Sub-Service provider shall investigate all accidents / incidents where employees and non- employees were injured to the extent that he / she / they had to be referred for medical treatment by a doctor, hospital or clinic and results recorded on file.
- 29.1.2. The Service provider and Subcontractor shall investigate all incidents including unsafe acts/conditions as described in Section 24 (1) (b) & (c) of the Act and keep a record of the results of such investigations including the steps taken to prevent similar incidents in future.
- 29.1.3. TASEZ reserves the right to hold its own Investigation into any incident or call for an independent external investigation.

30. Inspections, Formal Enquires and Incidents

The Service provider shall inform the relevant safety representative:

- 30.1. Beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
- 30.2. As soon as reasonably practicable of the occurrence of an incident on the site.
- 30.3. The Service provider shall record all incidents and notify the Employer's Health and Safety Agent of any incident, except in the case of a traffic accident on a

public road, as soon as possible after it has occurred and report such incidence to an inspector.

- 30.4. The Service provider shall investigate all incidents and issue the Employer's Health and Safety Agent with copies of such investigations.

31. Public Safety

- 31.1. The Service provider and subcontractor shall be responsible for ensuring that non-employees affected by his/her activities are made aware of the dangers likely to arise from said activities as well as the precautionary measures to be observed to avoid or minimize these dangers.
- 31.2. Appropriate signage shall be posted to this effect and all employees on site shall be instructed on ensuring that non-employees are always protected.
- 31.3. All non-employees entering the site shall receive induction into the hazards and risks and the control measures for these.

32. Service Provider Audits

Appropriate resources to the service provider to execute the work safely.

33. Record Keeping

The Service provider shall keep and maintain SHE records to demonstrate compliance with this SHE Specification and the Act on site and shall make all documents available for inspection by TASEZ, or the Department of Labour's Inspectors.

ANNEXURE A

SHE Inspection Checklist for Approval of Contractor SHE Plan

Name of Contractor	
Type of Business	
Scope of Work	
Applicable Legal Requirements	
Subcontractors performing work	
High-level Method Statement	
Contact Persons	

SHE Inspection Checklist for Approval of Contractor SHE Plan

Name of Contractor	
Type of Business	
Scope of Work	
Applicable Legal Requirements	
Subcontractors performing work	
High-level Method Statement	
Contact Persons	

Checklist

No.	Requirement	Yes	No	N/A	Comments
1	Letter of Good standing				
2	Proof of UIF				
3	SARS Tax Clearance				
4	Public liability (Business insurance with insurance cover)				
5	Contractor Management (Sub-contractor)				
6	Notification of Construction to Department of Labour				
7	Section 37(2) agreement				
8	Contractor sub-contractor/ appointment				
9	Organogram- Site specific (Roles & Responsibilities, Competencies, Address, contact details telephone number / cell number / e-mail address).				
10	Name list of all employees of contractor and copy of their Identification Documents				
11	Medical records				
12	Competencies, CV, Certification of employees (validate training records)				
13	EHS Training records				
14	Vehicle Insurance and Driver's Licenses(type)				
15	Contractor EHS policy statement (Signed by 16.1)-Communication				
16	Drug and alcohol policy				
17	Scope of work, Health and safety plan				

No.	Requirement	Yes	No	N/A	Comments
18	Project Baseline Risk Assessment (communicated, approved)				
19	Task Specific Risk Assessment Template				
20	Method statement (Reviewed and Approved by Contractor Liaison and Contractor)				
21	Safe Operating Procedures and Communication				
22	Toolbox topics (aligned with the scope of work, permit and Risk Assessment)				
24	EHS Incident reporting procedure				
25	Incident Statistics and man hours (Past 1 year)				
26	Waste Management plan/procedure				
27	Chemical management procedure (SDS, register, training)				
28	Fall protection plan/procedure (statutory inspections)				
29	Emergency preparedness (List of emergency contacts)- align with site specific contact details				
30	Equipment maintenance logs (3rd party if hired, training required)				
31	Legal inspection registers /all checklists				
	30.1. Portable electrical register				
	30.2 Portable electrical inspection check sheet				
	30.3 PPE Issue register				
	30.4 PPE Inspection Check sheet				
	30.5 Safety harness register				
	30.6 Safety harness inspection register				
	30.7 Hand tools register				
	30.8 Hand tool inspection check sheet				
	30.9 Vehicle inspection Check sheet				
	30.10 Fire fighter inspection Check sheet				
	30.11 First aid inspection check sheet				
	30.12 Step ladder inspection check sheet				
	30.13 Scaffolding inspection check sheet				
	30.14 Stacking and storage inspection check sheet				
31	Legal Appointments				
	31.1 OHS Act Section 16 (1) Appointment				
	31.2 OHS Act Section 16 (2) Assistant to Chief Executive appointment				
	31.3 CR 8(5) Construction Health and Safety Officer (SACPCMP registered)				
	31.4 CR 8(1) Construction Manager or 8(7) Construction Supervisor Construction				
	31.5 CR 16(1) Scaffold Erector & Supervisor				
	31.6 HCSR 3(3) Hazardous Chemical Substances Co-coordinator (Chemical Handler)				
	31.7 GAR 9(2) Incident Investigator				
	31.8 CR 28(a) Stacking and storage Supervisor				
	31.9 GSR 3 (4) First Aider Appointment				
	31.10 CR 9(1) Person to Perform Risk Assessments (Risk assessor)				
	31.11 Ladder inspector appointment				
	31.12 CR 23(1)(k) Construction Vehicle and mobile plant Operator or Driver				
	31.13 CR 10(1)(a) Competent Person to Prepare a Fall Protection Plan (Fall protection planner)				
	31.14 CR 29(h) Fire equipment inspector				
	31.15 EMR 10 Portable Electrical Equipment Inspector				

No.	Requirement	Yes	No	N/A	Comments
	31.16 DMR 18(5) & 18(6) - Lifting Machinery Inspector				
	31.17 DMR 18(11) - Lifting Machinery Operator				
	31.18 OHS Act, Section 17 – Health and Safety Representative				
	31.19 CR 13 (1)(a) Excavation Supervisor				