

CONSTRUCTION HEALTH AND SAFETY SPECIFICATION FOR THE SUPPLY, DELIVER AND INSTALLATION OF DISCONNECTORS (ISOLATORS) AND EARTH SWITCHES

> 01 September 2023 Revision0

# DOCUMENT INFORMATION SHEET

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# DOCUMENT CONTROL SHEET

PROJECT NAME	:	Supply, deliver and installation of disconnector (Isolators) and Earth Switches	
DOCUMENT TITLE	:	Construction H&S Specification for the Supply, deliver and installation of disconnector	
		Isolators and Earth Switches	
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# SIGNING OF THE ORIGINAL DOCUMENT

We, the undersigned, accept this document as a stable work product to be placed under formal change control as described by the Procedure: Management of Controlled Documents.

ORGINAL	Prepared by	Reviewed by	Approved by
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04-09-2023	Signature:	Signature:	Signature:

# **REVISITION CHART**

Revision Number	Alteration	Date
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2		
3		
4		
5		

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### 1. Definitions

For the purpose of this Construction Health and Safety Specification, all definitions in the Occupational Health and Safety Act & Regulations, the abbreviations and the definitions given hereunder shall apply:

- 1. "Agent" refers to Xaks Consulting (Pty) Ltd represented by a Professional Construction Health and Safety Agent appointed to act on behalf of the Client, and who is appointed in writing.
- 2. "Client" refers to George Municipality.
- 3. "COIDA" means Compensation for Occupational Injuries and Diseases Act 130 of 1993
- 4. "Competent person" means a person who
  - a. has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No 67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
  - b. is familiar with the Act and with the applicable regulations made under the Act;
- "construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site including overseeing occupational health and safety;
- 6. "construction site" means the approved construction footprint and grounds where construction work is being performed as part of this contract.
- 7. "construction supervisor" means a competent person responsible for supervising construction activities on a construction site;
- "construction vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing construction work; and, includes a bakkie or LDV used by the principal contractor or any contractor
- 9. "Contractor" refers to a Contractor of the Principal Contractor or a sub-contractor to such a contractor
- 10. "CHSS" refers to this document, the Construction Health & Safety Specification
- 11. "CR" refers to the Construction Regulations, 2014
- 12. "COC" refers to Certificate of Compliance.
- 13. "DSTI" refers to a documented daily safe task instruction compiled and issued by a contractor and trained to all relevant employees
- 14. "fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration devices, lifelines or similar equipment;
- 15. **"fall prevention equipment"** means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment;
- 16. "fall protection plan" means a documented plan, which includes and provides for
  - a. All risks relating to working from a fall risk position and work where there is a risk of dropping materials.

- b. The procedures and methods to be applied in order to eliminate the risk of falling and dropping of materials on persons; and
- c. A rescue plan and procedures;
- 17. "fall risk" means any potential exposure to falling either from, off or into;
- **18. "H&S"** refers to Health and Safety
- 19. "Health and Safety Plan" refers to a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.
- 20. **"Health and Safety Specification"** refers to a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons.
- 21. "Hot Work" means any work where there is a fire or explosion risk, including but not limited to all welding, plasma cutting, LPG-or acetylene gas applications, grinding, work with flammable or explosive substances and work with chemicals with the potential of exothermic reactions.
- 22. **"medical certificate of fitness"** means a valid medical certificate of fitness; such medical testing shall be relevant to the risks of the construction work performed on site and shall conform to the Occupational Health and Safety Act and Regulations and to the requirements in this H&S specification.
- 23. "Method statement" refers to a document detailing the key step by step activities to be performed in order to reduce as reasonably as practicable the hazards identified in the risk assessment.
- 24. "OHSA" refers to the Occupational Health & Safety Act of 1993
- 25. "Principal Contractor" means an employer who performs construction work for the client and who is appointed by the client.
- 26. "Regulations" refers to the Regulations issued under the Occupational Health & Safety Act.
- 27. "S" refers to a Section in the Occupational Health & Safety Act of 1993.
- 28. **"Sub-Contractor**" means an employer appointed by a contractor of the Principal Contractor to perform construction work on the Site; also means an employer appointed by a sub-contractor to perform work on the Site.
- 29. "Pr. CHSA" mean a professional registered construction health and safety agent with the SACPCMP.
- 30. "SACPCMP" means the South African Council for the Project and Construction Management Profession
- 31. Clearance Zone

Means an area declared safe and cleared from any employees, members of the public, vehicles or any other sort of structure that could either be harmed or damaged when construction works at performed at heights or lifting and lowering operations are performed.

# 32. Electrical Clearance Zone:

Electrical clearance zone means the consideration of safe clearance zone between electrical equipment, supply and any other equipment or material that has the ability to conduct electricity.

#### 33. Vertical lines

Means a safe method utilized to support the fall arrest and fall restraint systems when working at heights. The vertical lifelines consist of a certified safe for use cable attached to two or more anchor points on a structure.

### 34. Safety Harnesses

Means a safety harness used as fall protection equipment that has a double lanyard, the lanyard attaches two hook on points and lanyard legs to a shock absorber which allows employees to move around whilst being continuously attached.

# 35. Emergency Rescue Plan

Means a plan to establish the contractor approach and procedure for the responds to a mayor emergency. this plan should outline in the unlikely event of employees falling and being arrest in the fall how will the emergency rescue be implemented to ensure those employees is placed to safety.

# **2.** Project Scope of works

1. This project entail the supply, delivery and installation of 66Kv disconnector and earth switches for the George Municipality as per the project specifications.

2.A client baseline risk assessment has been conducted identifying all potential risks to be encountered, the contractor is therefore responsible to ensure a detailed contractor baselines risk assessment is undertaken and submitted for approval prior to the construction works starting on site.

# 3. Introduction to this Construction Health and Safety Specification

- 1. This Construction Health & Safety Specification is published in terms of the Occupational Health & Safety Act of 1993 (OHS Act), Construction Regulations 2014, Regulation 5(1)(b).
- 2. The CHSS does not replace the Construction Regulations, 2014, but is a supplementary specification as required in terms of the Regulations.
- 3. Partial references to or quotes from the Regulations do not imply that the sections not referred to or quoted from are of lesser importance or are not applicable.
- 4. The Principal Contractor with all other sub-contractors is, at all times required to and will remain responsible to fully address all requirements and standards of the Occupational Health and Safety Act, Regulations and the full Construction Regulations in the Health and Safety Plan and the implementation thereof.
- 5. The client is committed to ensuring that the highest standards of health and safety prevail and this CHSS may contain standards which are more onerous that the statutory standards.

# 4. Limitation of liability

- 1. The client or its Agent shall not be responsible for any acts or omissions of any Contractor which may directly or indirectly result from the application of the CHSS or any project specific version thereof.
- 2. All contractors must ensure that articles, work, equipment, machinery, plant and work practices are, at all times, compliant to the legal requirements as these apply.
- 3. The client shall limit its responsibility to the application of the Construction Regulations' Client Requirements only.
- 4. This CHSS is developed to ensure that the Client and any bodies that enter into formal agreements with the Client such as Consultants, Principal Contractors, and Principal Contractors achieve an acceptable level of OHS performance. No advice, approval of any document required by the CHSS or the Pr. CHSA, such as hazard

identification and risk assessment action plan or any other form of communication from the client or the Pr. CHSA shall be construed as an acceptance of any obligation that absolves the Principal Contractor from achieving the required level of performance and compliance with legal requirements. Further, there is no acceptance of liability by the client or the Pr. CHSA which may result from the Principal Contractor failing to comply with the CHSS.

- 5. The Principal Contractor shall enter into a Mandatary Agreement with the client, as defined in Section 37(2) of the Occupational Health and Safety Act. The Principal Contractor shall ensure that each contractor appointed by the Principal Contractor and each and sub-contractor appointed by a contractor also enter into a Mandatary Agreement with the client, as defined in Section 37(2) of the Occupational Health and Safety Act.
- 6. The Principal Contractor shall be appointed by the client in terms of the Construction Regulations of 2014.
- 7. These agreements and appointments shall be included in the Principal Contractor's H&S file on site and be valid for the duration of the contractor's work on the construction site.

# **5.** Purpose of the Construction H&S Specification

- 1. The purpose of the CHSS is to be used as the standard of H&S on this project on which Principal Contractors', Designers and other project representatives plan their project implementation thus ensuring safe work execution and legal compliance.
- 2. This CHSS will be applicable to all construction work performed on site.
- All employees working on this site shall conform to the standard in the CHSS. All the duties of a Principal Contractor in this CHSS equally apply, in full, to contractors of such Principal Contractor and to sub-contractors of such contractors.

# **6.** Implementation of the Construction H&S Specification

- 1. This CHSS forms an integral part of the Contract, and Principal Contractors are required to make it an integral part of their contracts with subcontractors and suppliers.
- 2. Any Principal Contractor submitting a tender for the Construction for this project shall ensure that the tender contains sufficient evidence of:
  - a. Adequate provision for the cost of health and safety measures;
  - b. The principal contractor's access to and intention to appoint persons with the necessary competencies to carry out the construction work safely;
  - c. The principal contractor's access to the necessary resources to carry out the construction work safely;

# **7.** Provision for the cost of H&S

1. The appointed Principal Contractor shall allow in their tenders for the cost of complying with the requirements of this CHSS and the legislative requirements based on the project scope of works.

# 8. Construction Works Permit or Notification of Construction Work

Based on the estimated Contract Value, duration of the project as well as estimated Man-hours of this project, it is not envisaged that a Construction Work Permit will be required. Therefore, the Principal Contractor should submit a Notification of Construction Works to the Regional Department of Employment and Labour situated in George. Proof of acknowledgement of receipt of such notice shall be kept on file.

# 9. Construction Manager

- 1. The principal contractor shall appoint a full-time competent person as the construction manager with the duty of managing all the construction work on the Site.
- 2. The construction manager must be exclusively dedicated to this project/site.
- 3. Proof of competency of the construction manager shall be incorporated in the H&S file; evidence of H&S competence and, as a minimum this shall include:
  - a. Proof of professional training
  - b. Proof of experience in the construction scope of work relevant to this project nature
  - c. Proof of experience in general H&S management for work as defined in the scope
- 4. The construction manager shall be responsible to ensure that the following duties are executed and shall actively communicate with the client-agent in order to:
  - a. Confirm and provide proof of compliance; and
  - b. Discuss any compliant constraints which may be experienced.
- The construction manager may be assisted by the safety officer and, where such an arrangement is planned, the H&S plan of the Principal Contractor shall clearly define the respective duties of the construction manager and of the safety officer.
- 6. The construction manager shall be appointed in writing and each of the tasks below shall be included in the signed letter of appointment.
- 7. The construction manager and safety officer shall present the site-specific health and safety plan, based on this health and safety specifications to the client agent and shall discuss and amend the H&S plan until finally approved by the Pr. CHSA
- 8. The construction manager shall ensure that the H&S plan is applied from the commencement of and for the duration of the construction work.
- 9. The construction manager shall ensure that the H&S plan is reviewed and updated as work progresses.
- 10. The construction manager shall open and keep the Site health and safety file and ensure that, at all times, this file is on site and available to an inspector, the client, the client's agent or a contractor.
- 11. The construction manager shall provide contractors and sub-contractors with this CHSS.
- 12. The construction manager with support of the safety officer only approve a H&S plan of a contractor and a subcontractor if there is sufficient evidence that the contractor:
  - a. Has made sufficient provision for health and safety measures during the construction process
  - b. Has the necessary competencies to perform the construction work safely; and
  - c. Has made the necessary resources available to perform the construction work safely.
- The construction manager shall ensure that all contractors appointed by the Principal Contractor have an approved H&S plan, prior to appointing the contractor and prior to allowing the contractor to start working on site.

- 14. The construction manager shall ensure that contractors have evidence of both registration and good standing in terms of COIDA and shall not permit any contractor to start work or to continue with work on site unless a valid Certificate of Good Standing is on site.
- 15. Additional to the requirements of the Construction Regulations, the Principal Contractors' construction manager shall ensure that all sub-contractors appointed by any of the contractors of the Principal Contractor comply with the construction regulations and, in particular, the construction manager shall:
  - a. Ensure that employees of these contractors are also inducted in the H&S induction program of the Principal Contractor;
  - b. Inform the Client Agent in writing (via e-mail) whenever a contractor or sub-contractor's H&S plan is approved.
- 16. The construction manager shall ensure all construction supervisors adhered shall adhere to the H&S requirements on site.
- 17. The construction manager and supervisor shall stop all construction work which is not in accordance with this CHSS or with the principal contractor's health and safety plan or which poses a threat to the health and safety of persons.
- 18. The construction manager shall ensure that, where changes are brought about to the design and construction on the site, sufficient health and safety information and appropriate resources are made available to any contractor.

# **10.** Construction Safety Officer

- 1. The Principal Contractor shall appoint a competent Construction safety officer for the construction work.
- 2. The Construction Safety Officer shall be part time on the construction site and have at least five years working experience as a safety officer working on electrical installation project within the construction industry.
- 3. The Principal Contractor shall define the duties of the appointed safety officer in the H&S file.
- 4. The safety officer shall have a valid registration with the South African Council for the Projects and Construction Management Professions.
- 5. Proof of competence and registration/proof of application & confirmation of the appointed construction safety officer must be included in the H&S file and file.
- 6. The authority and relationship of the safety officer with the construction manager must be documented in the H&S file.
- 7. The safety office should have access to resources such as mobile phone, laptop and printing machine to ensure all administrative requirements are implemented and adhered too.

# **11.** Hazard Identification and Risk Assessment

- The Principal Contractor shall appoint a competent person to perform a site-specific baseline- and, thereafter, ongoing issue-based hazard identification and risk assessment. There may be more than one risk assessor appointed if this is required.
- 2. The competent risk assessor shall form part of the construction team working on the construction site.

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- 3. The risk assessment must be based on the scope of work, the site-specific materials required, and the site-specific machinery, equipment and structures applied during the construction on this project.
- 4. The client requires that an additional risk assessment is conducted and submitted to the Pr. CHSA for verification when:
  - a. A new machine is introduced onto site
  - b. A system for work is changed or operations altered
  - c. After an incident or near miss has occurred
  - d. New knowledge comes to light and information is received which may influence the level of risk to employees on site.
- 5. All risk assessments shall be conducted in terms of an acceptable and documented methodology and control measure must comply to the hierarchy of controls prior to commencement of work and in accordance with the provisions of the CR.
  - a. The baseline risk assessment shall documented.
  - b. Issue-based risk assessment, risk monitoring and risk review shall be done at the hand of pre-task risk assessment communicated to all employers; a system of daily safe task instructions may be used. The risk assessment must include:
    - i. A daily tasks/activity list, step by step
    - ii. A daily documented listing of hazardous events
    - iii. A daily documented listing of H&S risk controls
    - iv. Proof of communication of the above to all employees: the client requires that the Principal Contractor shall ensure that all employees on site are conversant with the content of the all relevant risk assessments, the appropriate measures to either eliminate or reduce the identified risks. The Principal Contractor shall outline to employees what role they are expected to play in the Risk Assessment and control measure process.
- The principal contractor shall include a method for risk review ensuring that the all risks on site are adequately managed
- 7. All risk assessments must document all H&S controls. Should the Principal Contractor commence any work without a compliant risk assessment or should the risk assessment not reflect the activities being undertaken, the responsible contractor may be instructed to be immediately stop that specific activity, and the Principal Contractor will have no claim against the client in such a case for lost time or costs, irrespective of whether it can be demonstrated that the work was being safely undertaken.
- 8. The principal contractor should ensure issue-based project specific risk assessments and method statements for all high risk tasks identified on site:

# **12.** Health & Safety File and Plan

 The Principal Contractor shall provide and maintain an H&S File, containing all relevant documents as prescribed in the OHSS, the Construction Regulations of 2014 and all forms or records referred to that has relevance to specific legislation.

- 2. The H&S File shall be kept on site and available for inspection by the client Agent or the Department of Labour's Inspectors.
- 3. The content of the file is included in this specification, but additional items may be added.
- 4. The H&S plan should include and project background/introduction section taking into consideration the following:
  - I. Project name
  - II. Client details, name of responsible person and the business address
  - III. Client/Designer details, name of responsible person and the business address if applicable
  - IV. H&S CHSA details, name of responsible person and the business address
  - V. Principal Contractor, name of responsible person (16.2 appointee) and business address
  - VI. Completion project scope
- 5. The H&S plan should include a detailed site-specific overview of the
  - Scope of works and activities of the project; this overview must include all work controlled by the Principal Contractor, whether directly or through the services of a contractors or sub-contractors.
  - An overview of the machinery and plant used in the project; this overview must include all machinery and plant directly or indirectly (through the services of a contractor or sub-contractor) controlled by the Principal Contractor.
  - Specific on-site working hours should be stipulated in the H&S plan.

# H&S Plan Content & Numbering

- 1. Index of the H&S Plan
- 2. Project scope of works
- 3. Scope & activities, machinery, plant, equipment, hazardous articles to be used
- 4. Health and Safety Resources and Budget
- 5. Construction manager: duty, responsibility, authority, document control
- 6. Safety officer: duty, responsibility, authority, document control
- 7. Principal Contractor H&S management processes
- 8. Management of the issue-based risk-, risk review- and risk monitoring
- 9. H&S Induction training and H&S competency management
- 10. General record keeping management
- 11. Contractor and Sub-contractor management
- 12. Site communication management
- 13. Fall protection plan and method statements for heights work
- 14. First aid, accident & incident and emergency management
- 15. Fire prevention and equipment management
- 16. Safety signage management
- 17. Access & on-site traffic and public H&S management
- 18. Excavation management
- 19. Electrical management
- 20. Hazardous chemical substances management
- 21. Construction plant and machinery management
- 22. Lifting Operations and Management
- 23. Occupational hygiene, occupational health and fitness for work management
- 24. PPE management
- 25. Safety Inspections and Inspection Register management
- 26. Internal Audit management
- 27. Waste management

H&S File Content & Numbering

- 1. Index of the H&S File
- 2. Principal Contractor's Policies applicable to the construction site: Occupational Health and Safety Policy
- 3. Project and OHS organogram with contact numbers
- 4. Principal Contractor Appointment
- 5. Mandatary Agreement between client and the principal contractor
- 6. Proof of Construction Work Permit
- 7. Letter of Good Standing
- 8. Contractors Baselines Risk Assessment
- 9. H&S Plan
- 10. Induction Plan
- 11. Emergency Plan
- 12. Fall Protection Plan
- 13. Issue Based Risk Assessments
- 14. Construction Manager, Supervisor and Safety Officer letters of the appointed competent persons and evidence of competency (registrations, qualifications and other proof of competency)
- 15. Updated Employee List
- 16. Medical Certificates of Fitness
- 17. Legal appointment letters
- 18. Training and Competency Matrix
- 19. Training records
  - a. Employees H&S Induction records
  - b. Visitors Induction records
  - c. Records of training and competency for method statements
- 20. Incident Register & Investigation reports & COIDA Accident and incident management procedure
- 21. H&S Inspection Registers, list should be provided in the H&S Plan
- 22. PPE Issue Register
- 23. Internal Audits
- 24. Letters of approval of contractors and sub-contractors H&S Plans
- 25. Letters appointment of contractors and sub-contractors
- 26. Principal contractor's contractor- and sub-contractor audits
- 27. DSTI's
- 28. Audits by Client Agent
- 29. Corrective / Preventive Action plans for client audits
- 30. All supporting evidence deriving from the H&S Plan

# 14. Close-Out and Consolidated H&S file

- 1. The Principal contractor shall compile a consolidated H&S file and hand this to the Agent at the end of the construction work.
- 2. The consolidated H&S file shall be in hard copy and in USB format.
- 3. The consolidated file shall include:
  - a. A copy of the approved H&S plan of the principal contractor
  - b. The H&S file of the Principal Contractor, which, amongst the other, shall have dedicated chapters dealing with:
    - i. Project H&S plan Approvals Record
    - ii. Project H&S management plans, H&S plan, Fall Protection, Emergency plan, Storm water management, Traffic management
    - iii. Project Baseline Risk Assessments
    - iv. Designer inspections/assessments and confirmation of conformance

- v. Monthly Risk & Incident Reports
- vi. Incidents registers & IOD investigation record
- vii. COIDA Claim incidents and supporting medical treatment record
- viii. The completed final register required in the 'Staffing on Site' chapter of this CHSS
- ix. Monthly H&S performance report
- x. Monthly H&S audit reports from the Agent and the enjoining corrective action reports
- xi. Endorsed minutes of H&S Committee meetings
- xii. Employee lists as required in this CHSS
- xiii. Records of exit medicals records
- c. A reference record of all drawings, designs and materials used
- d. A reference record of H&S statutory certificates required by the owner; this reference record shall indicate the designated person at the principal contractor, who is responsible for the document and the client-designate to whom the document has been handed.
- e. The comprehensive list of all the contractors on site accountable to the principal contractor, including a list of the agreements between the parties and the type of work being done
- f. An index of all inspections and reference to the inspection registers for the site
- g. A list of all responsible persons appointed in statutory positions for the duration of the project
- h. A list of all occupational injuries and diseases including the name of the injured, the reference number of the Annexure I document and the reference number of the COIDA notification of the injury (if any)
- i. All documents relating to any reportable injury or disease during the construction work, as defined in Section 24 and 25, of the Occupational Health and Safety Act,

### 15. Induction and H&S Awareness

The Principal Contractor should ensure a project specific induction plan is available and that all employees, subcontractor or stakeholders undergo induction before entering on site.

The Principal Contractor shall develop a documented project-specific induction training plan that must be submitted for approval by the Agent, to ensure that all employees on site are conversant with:

- The risks of the construction project
- The controls documented in the H&S plan relating to working at a sub-station.
- The role of employees in ensuring health and safety on the construction site
- The emergency arrangements that are put in place by the Principal Contractor
- The general health and safety rules applicable to the site, inclusive of an introduction to whom the Construction Manager, Supervisors and Safety Officer is on site.

The contents of the induction programme and method of ensuring that all employees are inducted will be documented in the H&S file and the Principal Contractor is advised that a generic induction or a human-resource induction shall not be sufficient.

When working on the site, each employee of any contractor and sub-contractor accessing the site, including management, shall complete the principal contractors' induction; the principal contractor shall ensure that none of his or his contractors' employees accesses the site unless having been inducted by the principal contractor. Each visitor to the site shall be inducted in the risks and risk controls which the visitor may be exposed to; the visitor's induction and method to ensure compliance shall be documented in the H&S file.

#### H&S awareness

The Principal Contractor shall conduct, on site, periodic toolbox talks, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be kept and signed by all attendees. A record of who attended and the content of the topic will be kept on the site health and safety file as evidence of training. Awareness training of management responsibility on site must be conducted with all management representatives including contractors and sub-contractors.

#### 16. Health and Safety Competency

- 1. The principal Contractor shall ensure that the H&S plan includes evidence of such competence for every competent person designated to this construction site.
- 2. Work may only allow to be commenced if there is sufficient evidence of H&S competence for each person designated in the H&S plan; unless otherwise specified in this CHSS and as a minimum, this shall include:
  - a. Proof of training in the OHSA, CR and evidence that a training provider certifies the designated person to be familiar with the OHSA and with the applicable regulations made under the OHSA.
  - Proof of competency in the specific skill of the designation; amongst other this may include supervisory training, risk assessment training, equipment (such as ladders, lifting equipment, fire extinguishers, portable electrical machinery etc.) or high risk construction (such as working at electrical substation, installation of overhead electrical lines etc)

### 17. Staffing on site

- 1. The Principal Contractor shall compile a list of all employees on site indicating:
  - a. Name and ID number
  - b. Designation (job title)
  - c. Date of OHS Induction for the site
  - d. Date of expiry of medical
  - e. Where applicable, competency in the safe work instructions included in the H&S plan
- 2. This employee list shall be included in the start-up H&S file and maintained thereafter.
- 3. The H&S plan shall include a method statement on communication on site; this shall address:
  - a. Language and translation controls
  - b. Communication methods within and between teams (radio controls and permits)
  - c. Emergency communication methods
  - d. Regular planned meeting and communication sessions planned by the Principal Contractor.

#### **18.Public Health & Safety**

- 1. The works areas should be rendered safe before works commence and continuous supervised and monitored on site to prevent public risk exposures.
- 2. Construction work in progress, warning signage and barricading should be in place at all works areas.
- 3. All members entering site must indicate in what capacity they are visiting site and a site register should be completed and on record by the principal contractor.
- 4. The Principal Contractor shall ensure that each person visiting the site shall be inducted to the site and such induction shall outline the hazards likely to arise from on-site activities and the precautions to be observed to avoid or minimise those risks.
- 5. The Principal Contractor should ensure the public risks associated with mobile plant operations is controlled and managed on site, flag persons should be assigned to mobile plant operations that is in particular in reverse motion on site where member of the public is exposed.
- 6. Where members of the public and community is at risks to hazardous exposures, the principal contractor should ensure the works area and condition is rendered safe.

#### 19. Access, traffic management and camp site

- 1. All employees of all contractors working at the construction site shall access the site camp before works commence.
- 2. No employee shall be transported together with goods or tools.
- 3. All construction vehicles operating on site must comply with the requirements of the National Road Traffic Act, 1996.
- 4. The Principal Contractor shall ensure the traffic accommodation requirements as per this specification and the tender document requirements are adhered too at all times.
- 5. Where applicable the required approvals for the traffic manager for the George Municipality should be obtained and all the requirements of South African Road Traffic Signs Manual (SARTSM) and the CSRA/CUTA Road Signs Note 13, Roadworks are complied with on site for the duration of the construction works.
- 6. All activities planned to occur in the campsite shall be risk assessed and planned; this includes risk controls for the parking of staff- and visitor's vehicles, parking of mobile plant and machinery, dedicated storage areas, planned and compliant stacking practices, traffic controls, including the safe separation of pedestrian (employee) transport from risk areas.
- 7. Every construction vehicle shall:
  - a. Be in serviceable condition and safe.
  - b. Be inspected by a competent person daily and the result of the inspection logged in a register kept in the vehicle.
  - c. Where non-conformities are identified, these shall be subject to immediate and documented appropriate corrective action.
  - d. Have a serviced portable fire extinguisher installed at all times.
  - e. Be operated by a competent driver appointed in writing; the driver shall:
    - i. Be in possession of a conforming driver's license;
    - ii. Be in certified medically fit as a driver.

# 20.Night-, Week-End Work and Fatigue

- 1. Where week-end work is planned, the principal contractor shall ensure that its construction supervisor is on site; this applies even if only contractors or sub-contractors are working on the site.
- 2. Where week-end work is planned, each contractor or sub-contractor shall ensure that its construction supervisor is on site; this applies even if the principal contractors' manager or supervisor is on the site.
- 3. All working after hours and on weekends should be approved by the Client, before the contractor commence with such work.

# 21.Inspection, Monitoring and Reporting

- 1. The Principal Contractor shall carry out daily safety planned task observations and planned H&S inspections on the site (or more frequent, where so required in the Regulations), and shall take steps to rectify any unsafe condition of which he is aware.
- 2. The appointed Construction Manager (or a person designated by the Construction Manager) and the Health & Safety Officer shall perform regular inspections and document these in the H&S File.
- 3. The relevant inspection templates and the frequency of inspections shall be included in the H&S Plan.
- 4. The H&S Plan shall contain a list and template of all the inspection registers which shall be kept on site:
  - a. The templates must correlate with the machinery and equipment listed on site;
  - b. The inspector responsible for the inspection and maintenance of the register must be appointed in writing. Proof of training and competency in the performance of the inspections must be documented.

#### 22.Contractors and Sub-contractors

- Contractors and sub-contractors must be given a copy of this H&S Specification and any additional specification issued by the client, and shall comply with these specifications integrally. All employers working on this site shall conform to the standard in the CHSS. All the duties of a Principal Contractor in this CHSS equally apply, in full, to contractors of such Principal Contractor and to sub-contractors of such contractors.
- The Principal Contractor shall ensure that all contractors and sub-contractors under his control, plan the construction work in a H&S Plan, approved by the Principal Contractor; such H&S plan and H&S file shall be in accordance with guidelines provided in the specifications.
- 3. Whenever a contractor or sub-contractor's H&S plan is approved, the Principal Contractor shall communicate with the Agent (at <u>xavier.redcliffe@xaks.co.za</u>) for verification of the approved H&S plan prior to the contractor being allowed to start work. Unless the Principal Contractor has been notified of the approval of the H&S plan in writing by the Agent, no contractor shall commence work on site.
- 4. Principal Contractors shall ensure that all contractors and sub-contractors comply with their H&S Plans, based on all applicable H&S Specifications, the requirements of the OHSA and all other relevant legislation.
- 5. Regular planned task observations planned H&S inspections and monthly audits of all contractors and sub-contractors must be recorded and filed in the principal contractor's H&S File, for inspection by the client Agent.
- 6. The Principal Contractor shall ensure that the comprehensive and updated list of all the contractors and subcontractors on site, placed in the H&S file, includes:
  - a. A reference to the agreements between the parties, including all contractor's Section 37(2) agreements with the Principal Contractor and the Section 37(2) agreements with the client.
  - b. The type of work being done.
  - c. The date of the approval of the H&S plan.
  - d. The date of expiry of the COIDA certificate of good standing.
  - e. The date of the last monthly audit.
- 7. Principal Contractors shall ensure that each contractor and each sub-contractor enters into a Section 37(2) Mandatary Agreement with the client and that these agreements are signed and in place prior to approval of the contractor's or sub-contractors' H&S plan. The original agreement must be filed in the H&S file of the principal contractor.
- 8. The Principal Contractors' H&S Plan must include the Principal Contractor's procedures to ensure that all contractors and all sub-contractors fully comply with all H&S requirements; this must include, but is not limited to, defining the submission, assessment and final approval method (including the nominated responsible person) of H&S Plans of sub-contractors and the signing of a mandatary agreement with the client.

# 23.Personal Protective Equipment and Clothing

- 1. The Principal Contractor shall ensure that every employee is issued with, and wears SABS-approved PPE, consisting of all PPE identified in the risk assessment.
- 2. All the contractors' employees shall wear full length overalls and shall wear identification with respect to the employer.
- 3. All employees performing construction work shall wear steel-capped safety boots and a hard hat.
- 4. Employees working in the vicinity of mobile plant or construction vehicles shall wear a reflective vest; reflective stripes on overall do not meet the required visibility and shall not suffice.
- 5. The use of respiratory protective equipment shall be defined in the site risk assessment and validated at the hand of hygiene measurements of airborne pollutants for the specific risk.
- 6. The H&S Plan shall contain an outline of the PPE to be used and the management of such PPE on site, including the issuing of PPE, storage, any sanitising of PPE and all disposal of PPE.
- 7. Failure to use protective equipment as per the site risk assessment shall require disciplinary intervention and this process shall be documented in the site induction.
- 8. Disposal of PPE must conform to the Environmental legislation.

# 24.Occupational Health and Safety Signage

- 1. The Principal Contractor shall erect and maintain quality safety signage.
- 2. The signage shall include, but is not be limited to:
  - a. The work permit number displayed at the entrance
  - b. A sign indicating that all visitors must report to the site office and must be accompanied by the principal contractor when accessing the site
  - c. The name and telephone number of the responsible person(s)
  - d. Emergency telephone number(s)
  - e. PPE to be worn at the particular site
  - f. Traffic controls

# 25.First Aid Management

- 1. The Principal Contractor shall ensure that adequately trained first aiders are on site at all times when construction employees are on site; this is applies even if less than 10 employees are on site.
- 2. The Principal Contractor, any contractor or sub-contractor shall ensure that it appoints a trained First Aider on site regardless of number of labour on site.
- 3. First aiders shall be identified and shall have immediate access to a comprehensively stocked first aid box.
- 4. Such first aid box shall be stocked to include all first aid equipment as per the minimum requirements listed under General Safety Regulation 3, and any additional items identified in the risk assessment.
- 5. Where shift work is performed, each shift shall comply with the above first aid requirements.
- 6. All the above controls shall be documented in the H&S Plan.

# 26.Incidents, Accidents and Emergencies

- 1. All near misses, incidents and accidents must be recorded, investigated and managed in accordance with the statutory provisions.
- 2. Each H&S incident and accident must be recorded in a register kept in the H&S file; a template of the register shall be included in the H&S File.
- 3. Every accident shall be reported to the Agent immediately; that is as soon as the construction manager or the supervisor or the principal contractor becomes aware of it.
  - a. Such reporting must occur via direct contact (person-to-person or via telephone) and via e mail to <u>xavier.redcliffe@xaks.co.za</u>.
  - b. Incident Investigation process must be followed by competent role players and a preliminary investigation report must be submitted to the Agent within 24 hours for review and comment.
  - c. Final investigation must be finalized by the Principal Contractor and submitted to the Agent within 7 working days, unless requested otherwise.
- 4. A record of all incident investigations shall be kept in the health and safety file and all records shall be made available to the client without exception; this includes records relating to Section 24 of the OHSA.
- 5. Where a fatality or permanent disabling injury or any incident referred to in Section 24 occurs on the construction site, the Principal Contractor must ensure that the provincial director is provided 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 Principal Contractor intends to implement to ensure a safe construction site as far as is reasonably practicable.
- 6. The Principal Contractor shall ensure that contractors and sub-contractors apply the same measure and shall require that this process is documented in these contractor's H&S plan. The Principal Contractor's H&S plan shall include a specific procedure in this regard, which shall include that all documents and instructions in respect of any incident referred to in Section 24 shall immediately and unconditionally be forwarded to agent.
- 7. The contractor shall organise and document detailed emergency and accident arrangements on site and outline these, in detail, in the H&S Plan. These arrangements shall be specific for the site H&S risks and shall make specific provisions for:
  - a. A specified ambulance service

- b. A method to ensure that the appropriate COIDA documents are available on site, so that prompt medical aid, as defined in the COIDA, may be available to any injured employee.
- 8. The emergency arrangements shall be displayed on site and shall include:
  - a. A comprehensive emergency and evacuation plan
  - b. An emergency flow chart
  - c. An updated list of emergency telephone numbers
- 9. A site emergency and evacuation plan shall be included in the H&S plan.

# 27.Facilities for Employees

- 1. The Principal Contractor shall document the construction site's method to ensure the statutory application of employee's rights in terms of employee facilities as defined in the OHSA, the General Safety Regulations and the Construction Regulation, including:
  - a. The provision of facilities for safekeeping and changing
  - b. The method of ensuring that employees requiring to change on site can do so in privacy
  - c. The provision of an eating area
  - d. The provision and maintenance of sufficient toilets on site.
- 2. Contractor's toilets must be:
  - a. Fixed so as to avoid becoming wind-blown
  - b. Sign-written: 'Male' and 'Female' use
  - c. Sanitised daily; an inspection and sanitising record must be kept in the H&S file
  - d. Inspected daily and, where bucket collections are in place, emptied at least twice a week and one of these occasions must be on Fridays.
- 3. Consider the scope of works, the principal contractor should consider having temporary toilet at strategic points on site where works will be performed.

# 28.Audits and inspections

- 1. The client Agent shall conduct regular health & safety audits to ensure legal compliance and compliance with the Principal Contractors' H&S Plan.
- 2. Records of findings and audits shall be kept in the Principal Contractor's H&S File together with a record of any nonconformance report, investigation and corrective & preventative action.
- 3. The Principal Contractor shall document corrective action planning and forward this to the Client Agent within 48 hours of receiving a finding.
- 4. The Principal Contractor's H&S Plan shall document the corrective and preventative action procedure applicable to the project, including the planned method to ensure that non-conformities are managed immediately.
- 5. The client Agent shall stop all or any work which does not conform to the H&S Plan, which is contradictory to statutory requirements or which poses a threat to the health and safety of persons.
- 6. The Principal Contractor shall conduct and document monthly health & safety audits of all contractors and subcontractors to ensure compliance with the OHSA, its Regulations and the Principal Contractors' H&S Plan and of these contractor's H&S plan.
- 7. Records of Principal Contractor audits of all contractors and sub-contractors on site shall be kept in the Principal Contractor's H&S File together with a record of any non-conformance report, investigation and corrective & preventative action by sub-contractors and shall be made available to the Agent during monthly H&S audits.

# 29.Hot Work, Fire Risks, Fire Extinguishers and Fire Fighting Equipment

- 1. No open fires are allowed on site.
- 2. All flammable products must be stored in an adequate storage facility; this process shall be documented in a method statement in the H&S Plan.

- 3. The Principal Contractor shall provide suitable fire extinguishers and firefighting equipment, which shall be serviced regularly, in accordance with the manufacturer's recommendations.
- 4. Safety signage shall be prominently displayed in all areas where fire extinguishers are located. The Principal Contractor shall arrange for the training of the relevant personnel, in the use of fire extinguishers.
- 5. The fire extinguisher inspection register and the letter of appointment of the competent inspector shall be included in the H&S Plan.
- 6. Hot work permit is required on site, appropriate screens, fire prevention, fire extinguishing and a documented safe work permit system are all in place.
- The principal contractor shall include a hot work and lock out/tag out method statement in the H&S file for approval. Each person perform hot work or lockout shall be trained in the method statement and shall be documented in the H&S file.

# **30. Existing Services**

- 1. The Principal Contractor should ensure an on-site assessment is to determine the existing services before commencement of construction work.
- 2. Upon identification of the existing services, mitigation measure should be implemented on site to ensure minimal disruption or risk exposures to employees. Safe clearance distances should be implemented for all known services on site and the movement and operations of mobile plant should be adequately planned and managed on site.
- 3. The contractor should therefore ensure the required wayleaves are obtained from the relevant authorities.
- 4. The Principal contactor should ensure safe working method are implemented on site with regards to working in close proximity of existing services.

### 31. Live Energy Work and Electrical Reticulations and Machinery

- The Principal Contractor shall appoint a competent electrician who shall ensure zero potential of all electrical reticulations worked on and who shall ensure that dedicated power sources are safely installed for the use during the construction.
- 2. The Principal Contractor shall identify and inspect all exposed underground cables, overhead cables or any other electrical installations to ensure that these are not a hazard to any person.
- 3. The competent person shall certify and inspect all temporary electrical installations and machinery; the frequency shall be determined in the H&S plan.
- 4. The letters of appointment, proof of competency and registers applicable to these inspections shall be included in the H&S Plan.
- 5. All electrical cables shall be assumed "alive" and, where applicable, the Principal Contractor shall take adequate steps to ensure that all persons are prevented from accessing any electrical installations.
- 6. All existing electrical services must be assumed live at all times.
- 7. Contractors will ensure that all energy is brought to zero potential, that residual energy is purged, that energy sources are switched off and locked out by all employees working in the danger zone and are tagged, prior to any work being performed on the energy source or reticulation. The contractor shall include a zero Potential, Lock Out and Tag Out method statement and safe work instruction(s) in the H&S Plan.
- 8. No electrical machinery shall be allowed to have any joined leads.
- 9. The principal Contractor shall ensure that all electrical testing equipment to be used on site has a valid calibration and that the calibration sticker is affixed to the equipment, clearly indicating the calibration date and the next due date.
- 10. Any unsafe condition shall be reported immediately to the client and the Principal Contractor shall take immediate steps to prevent employees or members of the public from gaining access to the dangerous installation and the area surrounding it.
- 11. The Principal Contractor shall appoint a competent person to inspect all portable electrical tools, including leads. The letter of appointment and template of this inspection register shall be included in the H&S Plan.
- 12. The Principal Contractor shall include a method statement for the safe use of portable electrical tools, including the management of the hazards of extension leads.

- 13. Where temporary installations are installed a COC for these installations shall be included in the H&S File.
- 14. Where applicable, the contractor shall include any 'electrical dangerous work procedure' in the H&S Plan.

#### 32.Ladders

- 1. Ladders shall be compliant to the statutory requirements.
- 2. Ladders shall only be used for the purpose for which they are designed.
- 3. Ladders shall be identified, inspected regularly and the record of the inspection shall be kept in the H&S file.
- 4. A-frame ladders shall have a patent spreader bar system.
- 5. Ladders shall extend at least 90 cm above any level or opening accessed with the ladder.
- 6. No vertical ladders shall be accessed by any person unless firmly attached at the bottom and top or held in place by a fixed installation or a buddy.

#### 33.Cranes and lifting operations

The following shall apply to any crane used on site, including truck mounted cranes on delivery vehicles:

- 1. Each crane shall have (in the cab or operating area), the following legal documents on site at all times:
  - a. The latest and up-to-date load certificate of the crane;
  - b. A record of the 6-monthly inspection of the crane by a registered inspector;
  - c. The crane operator(s) current crane license;
  - d. The crane operator(s) medical certificate of fitness, issued by an occupational medical practitioner;
  - e. The inspection register or certification of 3-monthly inspection of all lifting equipment used with the crane;
- 2. Where applicable, the H&S Plan shall include the method statement for the erection, maintenance, inspections and dismantling of the crane.
- 3. The H&S Plan shall include the method statement for safe use of the crane, including the method of communication, the protection of fall zones and the method of determining whether the weather permits safe crane work.
- 4. Any fixed crane's load test certificates shall be included in the H&S file.
- 5. All lifting equipment and gear used on site shall be identified, SWL-indicated and listed in a register contained in the H&S file.
- 6. A template inspection register of the lifting gear shall be included in the H&S Plan.
- 7. Where TLB, front-end loaders or excavators are used for lifting or rigging, the principal contractor shall ensure that:
  - a. The lug or attachment point is certified and that a SWL is identified;
  - b. The operator is trained as a lifting machine operator and has a license as defined in Driven machinery regulation of the OHS Act.
- 8. The requirements for cranes and lifting operations apply equally to delivery trucks and the principal contractor shall ensure that all deliveries requiring lifting or rigging comply with the legal requirements.
- 9. The H&S plan shall include a specific method statement listing the planned lifts and the planned methods of attachment and rigging.
- 10. The principal Contractor shall ensure that deliveries using cranes comply with the above requirements and that all legal documents are kept in the cab of the delivery truck whilst on the Client's site.

#### 34.Storage and use of flammable liquids

- 1. No flammable substance must be stored on site unless these are stored in a flammable store or cage; no other materials shall be stored in the flammable store.
- 2. Where required, the H&S Plan shall include a method statement detailing the safe use, storage, decanting and spill controls for all flammable liquids used or stored on site.
- 3. Storage management must comply with Environmental legislation.

#### 35.Hazardous- Chemical Substances

- 1. With respect to hazardous chemical substances used, the contractor shall ensure that:
  - a. All MSDS are included in the H&S file
  - b. A HCS risk assessment is included in the H&S plan
  - c. The safe use, storage, emergency procedures and safe disposal of hazardous substances are addressed in a method statement/s, included in the H&S Plan.
  - d. Proof of competency and signed letters of appointment of the person responsible for chemical handling, is included in the H&S file.
- Any hazardous chemical substance intended to be applied on site during the project (i.e. after approval of the H&S Plan) shall be subject to an issue-based risk assessment and method statement, which must be presented to the client Agent prior to the substance being introduced on site.

#### 36.Housekeeping, Stacking, Storage and Drop Zones

- 1. The Principal Contractor shall appoint a person responsible for general housekeeping, and stacking and storage of materials and equipment on the entire site.
- 2. A method statement for the safe management of the drop zone shall be included in the H&S plan.
- 3. A method statement for the safe lowering of materials shall be included in the H&S Plan.
- 4. All deliveries of building materials shall be controlled by the appointed person for stacked areas agreed with the client.

### 37.Waste

- 1. The Principal Contractor shall appoint a person responsible for site-wide control & removal of scrap, waste and debris;
- 2. No hazardous waste, combustible materials and containers shall accumulate on the construction site;
- 3. The Principal Contractor shall document a waste management method statement in the H&S Plan. Such method statement shall include all liquid and solid waste produced during the construction process.
- 4. Designated waste areas should be identified on site.
- 5. Waste management must comply with the Environmental legislation.
- 6. All waste skips removed from site must be recorded and a proof of final deposit at a registered waste site (waste disposal certificate) must be on record in the H&S file.
- 7. Waste bins for domestic waste must:
  - a. Be placed at all eating areas
  - b. Have a functional lid, which prevents windblown dust and entry by monkeys
  - c. Be emptied daily.

#### 38.Client OH&S risk assessment

A client baseline risk assessment is included at Annexure B. The assessment takes into consideration the high-level risks associated with the construction work that was identified by the client representative. The contractor is required to develop their own baseline risk assessment for the construction works.

#### **39.Occupational Health**

- 1. The H&S file shall include:
  - a. All medical certificates of fitness for all employees working on the site, a list of all employees on site must be generated by the principal contractor and updated on a monthly basis. This list should include all sub-contractor as well.

- 2. The Principal Contractor and every contractor shall ensure that a person-job specification (PJS) is issued for each job title on the construction site. The PJS specification should be sent with each employee to the occupational medical practitioner in order for the medical testing and assessment to be relevant to the statutory requirements and the risk exposures.
- 3. All contractors shall use that occupational health examinations, medical surveillance and certificate of fitness are conducted for all employees working on the project.

**ANNEXURE A** 

### Acknowledgement of the H&S Specification by Principal Contractor

Construction Health & Safety Specification

Issued in terms of the Occupational Health and Safety Act, 1993

Construction Regulations, 2014

\_\_\_\_\_representing

Principal Contractor have satisfied myself with the content of this Construction Occupational Health and Safety Specification and shall ensure that the Principal Contractor, all contractors and sub-contractors and all employees on site comply with it.

Signature of Principal Contractor

Ι,

Signature of Agent

Date

Date

This document must be signed and returned to the Pr. Construction Health and Safety Agent.

# ANNEXURE B

Client Baseline Risk Assessment (find attached)