

PART 3: SCOPE OF WORK

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C3.1: EMPLOYER'S WORKS INFORMATION

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1 Description of the works

1.1 Executive overview

The scope of work is for the installation of plastic bird perch diverters and stainless steel straps in the following lines. The plastic bird perch diverters and stainless steel straps shall be collected from the storages (substation) named below.

Line Name	No of Towers	QTY-B/guards	QTY-Steel straps	Resp. person	SS Name (Storage)	SS Co-ordinate
Matla-Benburg 1	147	8820	26460	Godfrey Mazibuko	Simmerpan Steel Yard Germiston	Latitude -26.2258734 Longitude 28.1707794
Brenner-Eiger 1	69	4140	12420	Godfrey Mazibuko	Simmerpan Steel Yard Germiston	Latitude -26.2258734 Longitude 28.1707794
Matla-Esselen 1	98	5880	17640	Godfrey Mazibuko	Simmerpan Steel Yard Germiston	Latitude -26.2258734 Longitude 28.1707794
Matla-Glockner No1	134	8040	24120	Patrick Thwala	Glockner Substation	S26.604895; E27.988558

The plastic bird perch diverters and stainless steel straps shall be installed as per the installation guideline, 240-156074235.

1.2 Employer's objectives and purpose of the works

The objective of the project is raise as part of the Network Performance Operational Excellence stream that seeks to improve the overall performance of Transmission's lines.

1.3 Interpretation and terminology

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
AFC	Approved for construction
OBL	Outside battery limits
EA	Engineering Assistant

CM	Construction Manager
SS	Site Supervisor
PM	Project Manager
EM	Environment Manager
QA	Quality Assurance
SANS	South African National Standards
SES	Standard Environment Specification
SHE	Safety, Health and Environment
QS	Quantity Surveyor
HV	High Voltage
Kv	Kilo Volt
ORHVS	Operating Regulations for High Voltage Systems
MWP	Megawatt Park
EMP	Environment Management Plan
RP	Responsible Person

2 Management and start up.

2.1 Management meetings

Regular meetings of a general nature may be convened and chaired by the *Project Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Inaugural meeting	Before or after safety and environmental files have been assessed and approved and contractor authorised	Site or office/ to be confirmed	<i>PM, QS, Site Supervisor, EA, Grid safety and environmental representatives, Contractor</i>
Toolbox talk and risk assessment	Daily before works begins	Site or office/ to be confirmed	<i>Contractor, Supervisor, EA</i>
Project and Contract progress and feedback	As and when required or per Programme	Site or office/ to be confirmed	Project Team Members
Risk register and compensation events	Weekly or as and when necessary	Site or office/ to be confirmed	Project Team Members
Compensation clarification meeting	As and when required	Site or office/ to be confirmed	Project Team Members
Monthly progress meeting	Monthly	Site or office/ to be confirmed	Project Team Members
Emergency Meetings	As and when required or per Programme	Site or office/ to be confirmed	Project Team Members
Overall contract progress	Monthly/ As and when	Site or office/ to be	Project Team Members

and feedback	required	confirmed	
Audits	Periodically as determined by Eskom	Site or office/ to be confirmed	Project Team Members

Site Inaugural meeting will be held on site two (2) weeks prior to commencement of site activities and the Contractor shall avail safety file for auditing purposes.

Project progress meetings will be held once every fortnight on site in order to track work progress, safety, environmental and other issues. A Contractor must avail himself to these meetings.

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information, or if not so specified, be convened by persons at times and locations to suit the Parties, the nature and the progress of the works. Within five days of the meeting, the person convening the meeting shall submit records of the meeting to the Project Manager.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

It is the Employer's specific intention that the Parties and their agents use the techniques of partnering to manage the contract by holding meetings designed to pro-actively and jointly manage the administration of the contract with the objective of minimizing the adverse effects of risks and surprises for both Parties.

The *Contractor* attends management meetings at the *Project Manager's* request. These meetings are to be held fortnightly or as regularly as maybe determined by the *Project Manager*. At these meetings the *Contractor* presents all relevant data including safety, health and environmental issues, progress, quality plans, Sub-Contractor management, as may be required.

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information, or if not so specified, be convened by persons at times and locations to suit the Parties, the nature and the progress of the works. Within five days of the meeting the person convening the meeting shall submit records of the meeting to the *Project Manager*.

All meetings shall be recorded in a register, using minutes prepared and circulated by the person who convened the meeting. Such minutes (or register) shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the conditions of contract to carry out such actions or instructions

2.2 Documentation control

All documentation shall conform to the latest revisions of the following, i.e.: - SANS 10111 - Code of Practice for Engineering Drawings, or ISO 9001:2000 Quality Management Systems Requirements.

The documentation supplied by the *Contractor* shall be in both hard copy and electronic form. A minimum of three hard copies will be provided. Each document shall include, at a minimum, the following information:

- Title
- Status
- Revision
- References
- Purpose
- Description

All correspondence is to be as per ECC, addressed to the *Project Manager* with a sequential numbering system and all contractual communications will be in the form of properly compiled letters or forms attached to emails and not as a message in the emails itself.

2.3 Health and safety risk management

In addition to the requirements of the laws governing health and safety, Eskom have some additional requirements particular to the works and the Working Areas for this contract. The text below provides for these being attached as an Annexure to this Works Information. PLEASE ALSO READ CORE CLAUSE 27.4 TOGETHER WITH Z7 IN THE ADDITIONAL CONDITIONS OF CONTRACT TO MAKE SURE THAT WHATEVER IS INCLUDED IN THE ANNEXURE FOLLOWS ON FROM THOSE CLAUSES.

The Divisional/Regional Safety Risk Manager or his representative having jurisdiction over the works must provide the relevant safety, health and environmental (SHE) criteria for incorporation into this Works Information. The SHE specification / scope must be signed off by the Divisional/Regional Safety Risk Manager or his representative confirming that the applicable safety criteria have been taken into account.

The Commodity Manager / Buyer must refer the tender to the Divisional/Regional Safety Risk Manager or his representative in order to evaluate against enquiry-specific safety criteria.

The *Contractor* shall comply with the health and safety requirements contained in Annexure _____ to this Works Information.

The *Contractor* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *works*. In addition to the requirements of the laws governing health and safety, the *Contractor* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *Works*.

The *Contractor* shall comply with the health and safety requirements and control his/her activities and processes in accordance with the Occupational Health and Safety Act No.85 of 1993 and with the following documents:

1. SHEQ policy – 32 727
2. Eskom Procurement and supply chain management procedure – 32-1034
3. SHE Requirements for the Eskom Commercial process – 32- 726
4. SHE Policy 32-727
5. Contractor health and safety requirements – 32-136
6. Integrated SHE organisation: roles and responsibilities and statutory appointments – 32-296
7. Life-saving rules – 240-62196227
8. Working at heights – 32-418
9. Eskom Vehicle safety specification – 32-345
10. Employer's Health and Safety requirements - TST32-136

The authorization procedure for a permit to work shall be followed by the *Contractor* before commencing work on site. It is the *Contractor* responsibility to ensure that a permit to work is obtained before access to the work can be given. It is the Contractor's responsibility to also ensure that the safety file has been audited by the Health and Safety Representatives before establishing site.

The *Contractor* must be in possession of current first aid certificate. The Contractor's trucks must have a valid and current crane test certificate with the truck driver and crane operator's certificate. All tools must have valid and current test certificates, which must be produced two weeks before site establishment.

The *Contractor* will only leave site once a written site instruction has been issued by an Eskom site representative. Working hours will be from 07h30 to 16h30 during week days (as per outages) ,weekend work to be carried out only on request by Eskom.

The *Contractor* is to have an Eskom certified and authorized person available in each area where work is being performed at all times in accordance with Eskom transmission standard TST32-136 Contractor safety in a high voltage environment.

A complete safety and risk assessment must be done BEFORE the Contractor starts works on site. The Site Supervisor will be monitoring the works continuously to ensure strict adherence to Safety rules. If needed, the *Contractor* is to visit the site at the *Contractor's* cost before work commences to familiarize with the scope of works and to assess any safety issues.

Before any excavation is commenced, it will be the responsibility of the *Contractor* to ascertain from the Site Supervisor the position of any existing services on site. Once these are indicated to the *Contractor* they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the Contractor's account.

The *Contractor* shall allow safe access for other Contractors and Eskom personnel when required.

The *Contractor* shall establish a refuse control system. All waste is to be collected and disposed of as required by Eskom and the local authority.

The *Contractor* shall make his own arrangements for the provision of accommodation for his employees.

The *Contractor* attends management meetings at the *Project Manager's* request with the scheduled meetings as listed below. At these meetings the Contractor presents all relevant data including safety, health and environmental issues, progress, quality plans, Sub-Contractor management, as may be required.

The Contractor attends management meetings at the Project Manager's request with the scheduled meetings as listed below. At these meetings the Contractor presents all relevant data including safety, health and environmental issues, progress, quality plans, Sub-Contractor management, as may be required.

2.4 Environmental constraints and management

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure _____

The *Contractor* shall control his/her activities and processes in accordance with the Eskom's Environmental Requirements. The *Contractor* shall prepare a site specific EMP and inform the *Supervisor* and/or the *Project Manager* of any impact to the environment immediately after such an occurrence. Refer to the SHE Requirements 32-726 and SHEQ Policy 32-727

The *Contractor* is required to ensure that all goods, services or works supplied in terms of the tender/contract/order conform to all applicable environment legislation, Authorisations, EPC32-727: Eskom SHEQ Policy, ST32-726: SHE Requirements for the Eskom Commercial Process (additional requirements) and Project Specific Environmental Management Plan (EMP).

The *Contractor* shall control his activities and processes in accordance with Eskom's Environmental Policies: TST41-120 (rev 2). The Eskom EMP provides the Aspects and Impacts that will require management and must be followed strictly.

The *Contractor* shall prepare a separate mitigation plan for all environmental concerns raised through the EMP and in any other relevant forum. The Contractor must develop method statements based on the EMP. All developed method statements must be approved by the Employer.

Any changes to the approved EMP shall be reported and approved by (BUER) and Project Manager prior to the commencement of work and during construction. The supplier must ensure that all sub-Contractors' environmental management programmes comply with the contract shall define the specific system elements applicable to the Sub-Contractor's scope of work or supply.

- The containers in which waste is stored must be intact and not corroded or in any other way rendered unfit for the safe storage of waste;
- Adequate measures must be in place to prevent accidental spillage, or leakage, and in the case of an incident, adequate mitigation measures are in place to mitigate, and to prevent re-occurrence of the incident;
- Skips/bins must be closed to prevent the waste from being blown away, or rain entering and increasing volume of waste;
- Hazardous waste must be stored in covered containers and only open when waste is added or emptied
- Nuisances such as odour, visual impacts and breeding of vectors must be prevented from arising;
- Pollution of the environment and harm to health must be prevented by not disposing waste or permit waste to be disposed of on (any land, water-body or at any facility);
- Throwing, dropping, depositing, spilling or in any other way discarding any litter into or onto any public place, land, vacant erf, stream, watercourse, street or road, or on any place to which the general public has access, except in a container or a place specifically provided for such disposal;

- Disposing of waste in a manner that is likely to cause pollution of the environment or harm to health and well-being (e.g. the burning or burying of waste);
- Disposing of unclassified waste and
- Using unlicensed/unpermitted waste disposal facilities for Eskom waste.
- Ensure that Safe Disposal Certificates are retained for hazardous wastes that has been disposed of

Environmental meetings between Eskom and the *Contractor* may be held regularly and copies of the minutes may be submitted to Eskom on request. The Contractor is to send a flash report for any environmental incidences that has occurred on site as soon as possible or within 24 hours to the SS /Grid Environmental and PM clearly stating any impact to the environment.

Contractor must now sign-off TRM-FM-0038 – Eskom Holdings Transmission division Contractor environmental compliance Proformas.

If waste is generated during project, it must be disposed at a registered site and *Contractor* shall retain records of disposal.

The *Contractor* shall conform to requirements from the following documents:

- Eskom SHEQ Policy (EPC 32-727)
- Eskom Environmental Management plan
- TST41-120 rev 2 (Environmental Requirements for the Procurement of Assets, Goods and Services
- Please attach ST32-726 for additional SHE requirements
- TRM-FM 0081 – Environmental Tender evaluation form
- TRM-FM 0038 – Contractor Environmental Compliance

The *Contractor* shall comply with the environmental criteria and constraints stated in the Eskom Environmental Management plan. Returnable shall include:

- End of life cycle of equipment (disposal method).
- Specification for the equipment and inform Eskom of any hazardous components/substances
- Refer to TRM-FM 0081 – Environmental Tender evaluation form for other tender returnable

The *contractor* is to comply with a site specific EMP and to inform the site supervisor and PM of any impact to the environment immediately after such an occurrence.

Health and safety facilities on Site

The *Contractor* is to provide his own toilet facilities on site and ensure that these facilities are kept in a clean condition to Eskom's satisfaction. No work on site will be allowed to commence before the toilet facilities are available on site.

Contractor shall ensure that the Portable Toilet Hiring Company is registered with the relevant Municipality and a copy of the permit to be obtained.

Contractor to ensure that proof of disposal from portable toilet waste is obtained from the Permitted Portable Toilet Hiring Company. Environmental controls, fauna & flora, dealing with objects of historical interest.

The ILLEGAL transporting, handling, purchasing and selling, poaching and killing of fauna and flora will NOT be tolerated.

- Offenders will be prosecuted.
- All fauna kills as a result of the activities of the contractor must be reported.
- NO protected or endangered plants and trees may be removed or damaged in any way.
- The necessary permission to be obtained should it be necessary to cut or removed any desired, protected or endangered plant or tree.
- It is essential that construction staff be educated in endangered plants and trees.
- Sites and areas of archaeological and cultural significance should be identified on sites and demarcated prior to commencing work.
- Graves are not to be interfered with in any way.
- Supervisors to ensure that the location of these sites are communicated to their employees.

Site services and facilities

A site for the Contractor's yard will be provided adjacent to the site of the works where possible. The *Contractor* shall not occupy any area on site other than what's allocated to them.

The *Contractor* shall supply all plant and materials to complete the works.

Electricity is available on site. The *Contractor* shall provide all connections, extensions and additional supply points necessary for the works. Any measures, which the Contractor may require to maintain continuity and quality of supply, shall be arranged by him at his own expense.

Adequate and/or continuous supply is not guaranteed and no claims for delay or standing time as a result of insufficiencies or failures will be considered. Any measures which the contractor may require to maintain continuity and quality of supply shall be arranged by him at his own expense.

Water is not available on site. The contractor shall supply and test all water brought to site for construction and drinking purposes. The testing is for the Contractors own account.

Ensure no water pollution due to your activities taking place. Water usage on site to be verified with the site responsible person, the Project leader/Business Unit Environmental advisor to ensure compliance with legislation.

Control of noise, dust, water and waste

The *Contractor* to ensure no nuisance is caused to the landowner, his land occupants and / or his facilities. Contractor shall monitor dust and noise caused by mobile & other equipment during construction according to environmental legislation.

Mitigation measures to be implemented as required/agreed upon with the project leader/environmental Advisor.

Take over procedures

The Contractor is to arrange an inspection at least 1 week before completion to inspect and identify any outstanding or incorrect items.

No project to be signed off before the Business Unit has assured that no environmental liabilities exist.

The responsible person, project leader or Business Unit Environmental advisor to carry out a physical inspection before acceptance of work done is made.

No invoice to be processed before any acceptance is made.

All environmental documentation / file compiled during the project / contract to be handed over to the Grid Environmental Advisor.

2.5 Quality assurance requirements

The Supplier shall ensure that they comply with ISO 9001:2008 Quality Management System (QMS) and Eskom QM 58 requirements.

The Draft Contract Quality Plan (CQP) and Inspection and Test Plan (ITP) shall be approved by Eskom representative prior to commencement or signing of the contract. All the QITPs must be kept in a quality file on site to be prepared by the contractor before work commence.

The Notification period for Eskom attendance to Witness & Hold points is 4 days. The Witness & Hold points must be clearly indicated in the work programme submitted at the commencement of the work or after every progress or review meeting. The Site Supervisor will be responsible for the verification and signature of the Quality Inspection and Test Plans (ITPs) which must be maintained by the Contractor and presented for signing promptly and regularly.

The following standards contain provisions that, through reference in this text, constitute provisions of this specification. At the time of publication the revisions indicated were valid. All standards are subject to review, and parties entering into service agreements based on this specification are encouraged to investigate the possibility of applying the most recent revisions of the standards listed below. Information on currently valid national and international standards may be obtained from the Information Centre at Megawatt Park and Technology Standardisation Department.

The *Contractor* shall control his/her activities and processes in accordance with the Eskom's Quality Requirements, QM 58.

In the event of conflict between documents invoked here and the contents of this specification, the contents of this specification shall be considered to have preference. Such conflict shall be pointed out to the *Employer* for confirmation.

- Eskom NWS 1674 - "Standard Specification for approval of drawings submitted by Employer and Contractors."
- Project Quality plan

The *Employer* requires that the *Contractor* operate a quality management system as stated in the Scope. The *Employer* requires that the *Contractor* provide a quality policy statement and quality plan which complies with requirements stated in the Scope.

The *Contractor* submits his Quality Management System documents to the *Project Manager* as part of his programme under ECC3 Clause 31.2 to include details of:

- Quality Plan for the Contract
- Quality Policy
- Index of Procedures to be used and
- A schedule of internal and external audits during the Contract

The *Contractor* develops and maintains a comprehensive register of documents that will be generated throughout the Contract including all quality related documents as part of its Quality Plan.

2.6 Programming constraints

A high level Construction Program indicating the various durations of the Scope of Work is to be submitted by the *Contractor* with the Tender documents. This must clearly show that the contractor can execute this work by the end date.

A fully detailed comprehensive Programme shall be submitted within Seven (7) days after Contract Award and shall be in Ms Word Project format, indicating all Milestones, critical path and dates. The Programme shall be submitted to the Employer for acceptance.

The Programme shall be first be approved by the *Project Manager* and must be updated every second week or as requested by the *Project Manager* to reflect current progress.

Amongst other dates, the following dates shall be clearly reflected on the Programme,

1. Start and Completion dates for all activities,
2. Relevant key dates for hold and /witness points
3. Inspection dates

All relevant significant activities shall be shown in order to monitor the progress on site.

The *Contractor* shall include all stages including deliverables per stage in the Programme.

2.7 Contractor's management, supervision and key people

The following conditions will apply to supplier during the contract period:

- The supplier must submit the name of the company that has been selected for incubation and indicate the activities together with the percentage of incubation on prescribed template provided by SD&L.
- The supplier must submit the Implementation Schedule, which must indicate how the supplier intends to meet the SD&L commitments, within 30 .days of signing the contract. The completed Implementation Schedule should be forwarded to SD&L via the project manager. The template for the schedule is attached as Annexure 1.
- The supplier shall submit SD&L quarterly reports to the project manager on a prescribed template provided by ESKOM
- Non-compliance with regard to submission of SD&L Quarterly reports by suppliers will result in ESKOM withholding 2.5% of the invoice submitted for that month
- A total of 2% of the contract value will be retained to ensure compliance to SD&L obligations. In an event

of non-compliance at the end of the contract, the supplier will forfeit this amount.

The *Contractor* shall submit an organogram showing all key people involved in the Contract seven days after Contract Award.

All key personnel must be appointed in writing, must be current for the specific site and area of work and their details must be kept in a file

2.8 Invoicing and payment

Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

- Name and address of the *Contractor* and the *Project Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

The Contractor attaches the detailed assessment of the amount due to each tax invoice showing the Price for Work Done to Date for each item in the Price List for work which he has completed.

A tax invoice shall be submitted on completion of the works in the format required. A breakdown of all work completed during the previous period shall be attached. Invoicing and relevant details will be discussed at site hand-over meeting. Payments will be processed once all completion certificates and invoices are submitted.

2.9 Insurance provided by the *Employer*

2.10 Contract change management

Where Standard forms are available, they should be used

2.11 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Project Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer's* right to termination stated in this contract.

2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the *Contractor*

Defined costs are actual costs incurred by the *Contractor*. These costs should not include profit or company overheads. All compensation events will only be paid on defined costs. Compensation events will be assessed and approved by the project manager in agreement with the Eskom QS and if the claim deemed legitimate. Contractor cannot use compensation events as the means or tool to make profit however is only applicable to conditions where unforeseen circumstances and element of scope not covered.

In an event of labour costs, the *Contractor* is required to provide pay slips of the employees used. The labour mark-up indicated in this contract will be added to these actual costs to form the final value of the compensation event.

In the event that the *Contractor* is required to supply anything other than people, the Contractor is required to provide a copy of his *Contractor's* invoice. The profit and overhead mark-up indicated in this contract will be added to these actual costs to form the final value of the compensation event.

Copies of payslips and *Contractor's* invoices are to accompany the requests for compensation events. The *Contractor* shall under no circumstances refuse additional work on the basis of costs as defined above.

2.13 Training workshops and technology transfer

The Contractor shall provide on job training workshops, as well as any technology transfer as part of the contract on Completion of the works.

3 Engineering and the *Contractor's* design

The content of this section will depend on whether the contract is for construction only with most of the design done by (or for) the *Employer* or whether it is a 'design and construct' contract. ECC provides for design by either Party in any proportion, which proportion done by the *Contractor* must be stated in this part of the Works Information.

3.1 *Employer's* design

All construction will be done in accordance with Eskom's policies, standards and design or drawings provided. No deviation from any design or drawing will be accepted, unless requested through the PM and approved in writing by the responsible Eskom designer.
All drawings used must be as per the drawing register.

3.2 Parts of the works which the *Contractor* is to design

The Contractor is to design any temporary works required to construct the works.

3.3 Procedure for submission and acceptance of *Contractor's* design

All Contractors' designs are to be submitted to the Project Manager for acceptance and approval by the responsible Eskom Designer.

3.4 Other requirements of the *Contractor's* design

Not applicable

3.5 Use of *Contractor's* design

Not applicable

3.6 Design of Equipment

Not applicable

3.7 Equipment required to be included in the works

Not applicable

3.8 As-built drawings, operating manuals and maintenance schedules

The *Contractor* shall provide Eskom with the detailed “As-Built” records where deviations from the original for construction drawings have been fourteen (14) days after Completion Date.

These are up-to-date approved drawings at the completion of the contract. Tenderers shall allow in their price for submitting to the Engineer a CD disk containing each of the up-to-date general arrangement drawings, and shop drawings.

Submission of Contractor's drawings: Drawings shall be submitted to the Project Manager in orderly fashion commencing within the following time limits **or** as determined by the main contract programme (where applicable):

Contractor work drawings	:	Within 2 weeks of tender acceptance.
General layout drawings	:	Within 4 weeks of tender acceptance.
Shop drawings	:	Within 6 weeks of tender acceptance.
As-built drawings	:	At completion before first hand-over.

By submitting drawings, the Contractor represents that he has determined and verified all site measurements, site instruction criteria, materials, catalogue numbers and similar data, or will do so, and that he has checked and co-ordinated each of his drawings with the requirements of the works and the contract documents, taking into account drawings from the Engineer.

At the time of submission, the Contractor shall inform the Engineer in writing of any deviation in the Contractor's drawings from the requirements of the contract documents.

The Engineer will review and approve drawings with reasonable promptness (so as not to cause a delay) only for conformance with the design concept and the contract requirements.

The Engineer may, at his discretion and depending on the number of discrepancies, require amendment and resubmission prior to approval. Drawings shall be resubmitted until approved prior to any portion of the works related to the drawings being commenced.

Should the Contractor during drawing amendment, alter any portion of his drawings not specifically required by the Engineer; he shall point this out in writing when resubmitting the drawing.

Approval of the Contractor's drawings in no way indemnifies him from being responsible for the correctness of the drawings and satisfactory operation of the installation.

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed on the Site

The *Contractor* shall comply with the Employer's site requirements in the use of labour for the works.

All people employed on the site by the *Contractor* shall have Police Clearance and be vetted through the Grid Security Manager's office according to the Grid code before accessing site. before work on site commence.

The *Contractor's* employees shall be sober on site and may be subjected to random breathalyser tests.

The *Contractors* shall have an Eskom Authorised employee and safety file assessed and approved by Eskom Safety personnel.

All workers will be subject to ad hoc breathalyser tests at any time when on duty.

All workers must wear seat belts at all times when travelling in their vehicles while on Eskom business.

4.1.2 BBBEE and preferencing scheme

The *Contractor* shall comply with the Employers' Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures

4.1.3 Supplier Development Localisation and Industrialisation (SDL&I)

The **Contractor** complies with and fulfils the **Contractor's** obligations in respect of the SDL&I in accordance with SDL&I Matrix stated below

The works will be 100% local to South Africa as per the applicable SDL&I Matrix.

SDL&I Matrix or Undertaking

Birdguards Installation				
SiteTABLE 1: SUPPLIER DEVELOPMENT AND LOCALISATION COMPLIANCE MATRIX FOR SUPPLIERS AND CONTRACTOR				
Criteria	Weight (%)	Total Target (%)	Proposed Target	Total Overall (Weighted Score)
Local Content to SA	75%	100%	0%	0,00%
Skills development	25%			0,00%
Total	100%			0,00%
Total Supplier Development and Localisation Score				0,00%

TABLE 2: SKILLS DEVELOPMENT COMPLIANCE MATRIX							
Skill Type (Occupation)	OFO Occupational Group	Weight (%)	Target Number of Persons to be Trained (Local to South Africa)	Proposed Number of Persons to be Trained (Local to South Africa)	Target Number of Persons to be Trained (Local to Site)	Proposed Number of Persons to be Trained (Local to Site)	Total Weighted Score
Artisans		50,00%	1	0	1	0	0,00%
Total		50,00%	1	0	1	0	0,00%

To be completed by Tenderer

Number of jobs to be created as a result of this contract	
Number of jobs to be retained as a result of this contract	

Tenderer to further propose any possible Job creation / Job retained in this project.

The **Contractor** shall keep accurate records and provide the **Project Manager** with reports on the **Contractor's** actual delivery against the above stated SDL&I criteria.

NB: A retention of 2.5.% per invoice will apply and will be released upon verifying SDL&I commitments contract and will be released upon submission of full compliance-.proof.

The **Contractor's** failure to comply with SDL&I obligations constitutes substantial failure on the part of the **Contractor** to comply with his obligations under this contract.

Monitoring and Reporting

- The suppliers shall on a monthly/quarterly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SDL&I obligations described above.
- Eskom shall review the SDL&I reports submitted by the suppliers within 60 (sixty) days of receipt of the reports and notify the suppliers in writing if their SDL&I obligations have not been met.
- Upon notification by Eskom that the suppliers have not met their SDL&I obligations, the suppliers shall be required to implement corrective measures to meet those SDL&I obligations before the commencement of the following report, failing which Retention clauses shall be invoked.

Every contract shall be accompanied by the SDL&I Implementation Schedule which must be completed by the suppliers and returned to SDL&I representative for acceptance 28 days after contract award.

SDL&I Progress Reports

The **Contractor** shall submit monthly SDL&I progress reports to the **Project Manager**. SDL&I progress reports shall be submitted by the 7th (seventh) day of the month following the months to which the report relates.

An electronic copy and two hard copies of each SDL&I progress report shall be submitted to the Project Manager

4.2 Subcontracting

4.2.1 Preferred subcontractors

The *Employer* reserves the right to approve all sub-Contractors that the *Contractor* intends to enter into subcontracts with in order to make sure that the sub-Contractor complies with operational standards. The *Contractor* shall not subcontract more than twenty five percent (25%) of the whole of the contract.

Principal *Contractor* will assess Subcontractor and shall submit proof of assessment to the Employer Principal *Contractor* to ensure that any Subcontractor that will be appointed by Principal *Contractor*, are in compliant with the OHS Act, Construction Regulations for the scope of work and submit proof of compliant to Client, par of Principal *Contractor* safety file contents under sub-contracting.

4.2.2 Subcontract documentation, and assessment of subcontract tenders

The NEC system is compulsory for all subcontract documentation.

4.2.3 Limitations on subcontracting

The *Contractor* shall not subcontract all the Works. The Contractor is to subcontract not more than 20% of the work. No work may be subcontracted unless permission has been granted by the Employer.

4.2.4 Attendance on subcontractors

The *Contractor* is responsible for providing all the Works as if he/she had not subcontracted

4.3 Plant and Materials

4.3.1 Quality

The *Contractor* shall remain responsible for the quality of all the plant used and materials supplied. If the *Contractor's* supplier is used for the manufacturing and erection of any steel work the contractor must ensure that the quality is in line with Eskom's requirements. Any non-conformance must be corrected before handing over. The *Contractor* shall control his activities and processes in accordance with Eskom's Quality Requirements for Procurement of Assets, Goods services.

4.3.2 Plant & Materials provided "free issue" by the *Employer*

All other Plant and Materials are to be provided by the *Contractor*.

4.3.3 *Contractor's* procurement of Plant and Materials

The Employer may require warranties from suppliers to be in favour of the Employer and not just to the *Contractor* during the life of the contract. Also include requirements for vendor data which the Employer may need after Completion of the whole of the works. Security personnel are to be advised at least 24hours before any delivering of material take place on site. Failure to do so may result in delays that will to the Contractors account.

4.3.4 Spares and consumables

The *Contractor* shall control his activities and processes in accordance with Eskom's Quality Requirements for Procurement of Assets, Goods & Services TST41-168, as amended

4.4 Tests and inspections before delivery

All structural steelwork is to be inspected by the Contractor and verified by the quality representative of the Employer before being delivered to site and should have a certificate from the Galvanizer stating the coating thickness. For verification purposed, the Contractor must notify the Project Manager two weeks before delivery of structural steelwork. Core Clauses 40 and 41 both make reference to the Works Information regarding tests and inspections. Cube test, slump tests etc.

4.5 Marking Plant and Materials outside the Working Areas

Core clauses 70.1 and 71.1 require the Works Information to state how the *Contractor* is to “mark” Plant and Materials which is outside the Working Areas if they are to be paid for before delivery to the Working Areas.

4.6 Contractor’s Equipment (including temporary works).

The *Contractor* keeps daily records of his Equipment used on Site and the Working Areas (distinguishing between owned and hired Equipment) with access to such daily records available for inspection by the *Project Manager* at all reasonable times.

Equipment provided by the Employer.

No Equipment will be provided by the Employer.

4.7 Cataloguing requirements by the Contractor

State whether cataloguing is applicable, if it is, reference the requirements for cataloguing that need to be satisfied by the *Contractor* (consult Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240-1289988974).

5 Construction

This part of the Works Information addresses constraints, facilities, services and rules applicable to the *Contractor* whilst he is doing work on the Site during the construction and maintenance phase. It does not specify the work itself as that is included in Section 6 of the Works Information.

For contracts involving civil works the approach may be to incorporate SANS1200A or SANS 2000 into the contract. Whilst many of the headings below address the same issues, the list of headings below is more comprehensive. If the headings below are used, it may be prudent to delete paragraphs 3, 4 and 5 from 1200A after checking that their requirements have been included below as necessary. A similar approach can be used in contracts involving building works where the Model Trade Preambles are incorporated. Care should be taken to avoid inconsistency or ambiguity between this part of the Works Information and standard specifications incorporated by reference.

5.1 Temporary works, Site services & construction constraints

5.1.1 *Employer's* Site entry and security control, permits, and Site regulations

Entry to the site is governed by the Grid's Engineering Assistant and the Contractor shall adhere to all regulations given. All employees are to sign the Workers declaration on entering and leaving the working area. The Contractor must have an Eskom Certified and Authorized ORHVS person (Valid as requested by ESKOM) available on site at all times in accordance with Eskom Authorisation Standard in terms of Regulations for High-Voltage Systems 240-70413865 (34-146).

The authorization procedure for a permit to work shall be done before the Contractor commences work on site. The Contractor's Responsible Person has to be interviewed and authorised by the East Grid High Voltage Plant personnel before any work can commence on site. Copies of the valid Eskom ORHVS Certificates are to be submitted before any construction work commence on site.

It is the Contractor's responsibility to ensure that the authorization procedure for a permit to work is obtained before access to the work can be given. The Contractor is to supply Eskom with Police clearance for all the employees on site before Work commences. All clearances must be sent to Daphney Ndou: +27 76 914 6212 prior to accessing the site.

5.1.2 Restrictions to access on Site, roads, walkways and barricades

Access on site is restricted to the area in which the Contractor is working and which has to be barricaded. Strictly no movement outside the barricaded working area unless escorted by authorized HV Plant personnel. The majority of the work is to be performed in the live HV Yard and the Contractor will take all necessary precautions and work in conjunction with Eskom personnel.

Every excavation, which is accessible to the public, including other contractor's or Eskom personnel, or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered shall be: protected by a barricading fence consisting of not less than two ropes or wires stretched at heights of 600 mm and 1 200 mm between poles or standards, of strength adequate to safely contain pedestrians and as close to the excavation as is practicable. The maximum speed limit on site is 20km/h.

5.1.3 People restrictions on Site; hours of work, conduct and records

The normal working hours shall be from 07:30 am to 04:00 pm. Any work done outside this duration must be arranged through the senior HV Plant supervisor.

5.1.4 Health and safety facilities on Site

The *Contractor* is to provide his own toilet facilities on site and ensure that these facilities are kept in a clean condition to Eskom's satisfaction. No work on site will be allowed to commence before the toilet facilities are available on site. Contractor shall ensure that the Portable Toilet Hiring Company is registered with the relevant Municipality and a copy of the permit to be obtained. *Contractor* to ensure that proof of disposal from portable toilet waste is obtained from the Permitted Portable Toilet Hiring Company.

5.1.5 Environmental controls, fauna & flora, dealing with objects of historical interest

The ILLEGAL transporting, handling, purchasing and selling, poaching and killing of fauna and flora will NOT be tolerated.

- Offenders will be prosecuted.
- All fauna kills as a result of the activities of the Contractor must be reported.
- NO protected or endangered plants and trees may be removed or damaged in any way.
- The necessary permission to be obtained should it be necessary to cut or removed any desired, protected or endangered plant or tree.
- It is essential that construction staff be educated in endangered plants and trees.
- Sites and areas of archaeological and cultural significance should be identified on sites and demarcated prior to commencing work.
- Graves are not to be interfered with in any way.
- Supervisors to ensure that the location of these sites is communicated to their employees.

5.1.6 Title to materials from demolition and excavation

All the materials from excavation and demolition must be disposed of by the *Contractor* except where expressly stated by the PM or the relevant staff from the Grid. All rubble and other materials must be classified, weighed and transported to a registered waste disposal site.

5.1.7 Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

- 1) The cross reference from core clause 25.1 about cooperation generally as well as details about Others with whom the *Contractor* may be required to share the working areas. See clause 11.2(10) for the definition of Others.
- 2) Requirements for liaison with and acceptance from statutory authorities or land owners.

5.1.8 Publicity and progress photographs

Warning signs and notices must be clearly displayed at all sites where work is taking place. It is the responsibility of the Contractor to ensure that all its workers and visitors adhere to all signs. No photographs are to be taken without the permission of the E.A.

5.1.9 Contractor's Equipment

All equipment must be registered in the equipment register and as per 32-136. The Contractor is responsible for his own insurance of his equipment. The *Contractor* is to take stock of his material and equipment on a regular basis and any shortage to be reported to the Project Manager immediately, stating if it is hired or owned.

5.1.10 Equipment provided by the Employer

Not applicable.

5.1.11 Site services and facilities

A site for the Contractor's yard will be provided adjacent to the site of the works where possible. The *Contractor* shall not occupy any area on site other than what is allocated to them. The contractor shall supply all plant and materials to complete the works.

Electricity is available on site. The Contractor shall provide all connections, extensions and additional supply points necessary for the works. Any measures which the *Contractor* may require to maintain continuity and quality of supply shall be arranged by him at his own expense.

Adequate and/or continuous supply is not guaranteed and no claims for delay or standing time as a result of insufficiencies or failures will be considered. Any measures which the contractor may require to maintain continuity and quality of supply shall be arranged by him at his own expense. Water is not available on site. The Contractor shall supply and test all water brought to site for construction and drinking purposes. The testing is for the Contractors own account. Ensure no water pollution due to your activities taking place. Water usage on site to be verified with the site responsible person and the Project leader/Business Unit Environmental advisor to ensure compliance with legislation.

5.1.12 Facilities provided by the *Contractor*

All the water necessary for construction and drinking purposes must be provided for by the *Contractor*. It is the *Contractor's* responsibility to test any water before being used. The *Contractor* is to submit a Test Certificate for the water brought and used on site. The *Contractor* is to provide his own toilet facilities on site and ensure that these facilities are kept in a clean condition to Eskom's satisfaction. No work on site will be allowed to commence before the toilet facilities are available on site. The *Contractor* shall provide everything else necessary for providing the Works.

5.1.13 Existing premises, inspection of adjoining properties and checking work of Others

The Works is to be carried out within existing HV yards and the *Contractor* is to take note of the surrounding foundations, equipment and buildings and underground cables and services.

5.1.14 Survey control and setting out of the *works*

The *Contractor* is responsible for setting out the works as shown on the drawings.

5.1.15 Excavations and associated water control

All necessary precautions shall be taken to ensure that deep excavations are safe and that the sides are stable, if not they shall be battered. All excavations are to be properly barricaded at all times.

5.1.16 Underground services, other existing services, cable and pipe trenches and covers

Before any excavation commences, it is the responsibility of the *Contractor* to ascertain from the "Engineering Assistant" the position of any existing services on site. Once these are indicated to the *Contractor* they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the *Contractor's* account.

Any damage of known pipes, cables or other services must be reported to the site supervisor and the damaged service must be restored at the cost of the *Contractor* under the supervision of either the EA or SS. The existing oil drainage pipe shown in drawings provided, is to be blocked off by sealing the manholes with concrete as shown in drawing 0.07/17688 rev1.

5.1.17 Control of noise, dust, water and waste

The *contractor* to ensure no nuisance is caused to the landowner, his land occupants and / or his facilities. *Contractor* shall monitor dust and noise caused by mobile & other equipment during construction according to environmental legislation.

Mitigation measures to be implemented as required/agreed upon with the project leader/environmental advisor.

5.1.18 Sequences of construction or installation

Refer to Section 3 on the Data by Employer

5.1.19 Giving notice of work to be covered up

The *Contractor* is to give the Site Supervisor at least 2 days' notice before covering up the work.

5.1.20 Hook ups to existing works

The works is on the existing towers, *Contractor* shall apply caution and safety standards when executing the works.

5.2 Completion, testing, commissioning and correction of Defects

5.2.1 Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the Employer from using the works and Others from doing their work.

	Item of work	To be completed by
	Any outstanding work as listed in the Completion & Handing	Any outstanding work as listed in the Completion & Handing
	As built drawings Within 14 days after Completion	As built drawings Within 14 days after Completion

5.2.2 Use of the *works* before Completion has been certified

The Contractor is to complete all works by the contractual end date.

5.2.3 Materials facilities and samples for tests and inspections

Not applicable

5.2.4 Commissioning

Not applicable

5.2.5 Start-up procedures required to put the *works* into operation

Not applicable

5.2.6 Take over procedures

The Contractor is to arrange an inspection at least 1 week before completion to inspect and identify any outstanding or incorrect items. No project to be signed off before the Business Unit has assured that no environmental liabilities exist. The responsible person, project leader or Business Unit Environmental advisor to carry out a physical inspection before acceptance of work done is made. No invoice to be processed before any acceptance is made. All environmental documentation / file compiled during the project / contract to be handed over to the Grid Environmental Advisor

5.2.7 Access given by the *Employer* for correction of Defects

The Contractor will be responsible for ensuring that the area to be worked in is barricaded before correcting any defects.

5.2.8 Performance tests after Completion

Many design and build or turnkey projects require the *Contractor* to demonstrate that the *works* can operate as guaranteed by the *Contractor* (in *Contractor's* Works Information) or specified by the *Employer* either here or elsewhere in this Works Information. State here the procedures for carrying out such proving tests. These details should link up with any performance levels stated in Contract Data if secondary Option X17 in ECC3 applies.

Not applicable

5.2.9 Training and technology transfer

Include if the *Employer* requires the *Contractor* to provide training in the use and maintenance of the *works* or any associated transfer of technology from him to the *Employer*.

Not applicable

5.2.10 Operational maintenance after Completion

The *Employer* may require the *Contractor* before the *defects date* to perform certain duties after Completion and take over which relate to maintenance of the *works*. (Not to be confused with Defect correction) For example oil and filter changes

Not applicable

6 Plant and Materials standards and workmanship

This section of the Works Information contains all the specifications for the work which is left behind; the permanent works. It is likely to be the largest section by far and may even be compiled in volumes, e. g. Section 6 Volume 1: Civil Engineering Works. In design and construct contracts, it may be compiled in accordance with systems within the works; e.g. Section 6 Volume 4: Crushers. Because practice varies widely between employers it is not practical in a general template such as this to deal with all arrangements. Only the discipline based section subheadings are provided below in the order the works are likely to be constructed together with some notes of a general nature.

6.1 Investigation, survey and Site clearance

The Contractor carries out the following investigations on Site:

1. Conducts an investigation to determine all existing services on the site. Marks and records all these services.
2. The Contractor to investigate the proposed site access option as detailed in this works information.
3. Maintains a concise record of the conditions of all existing buildings, structures and services.

The *Contractor* must provide suitable machinery to execute the works as per contractual agreement at their own cost. Also, note that there could be constraints on Site clearance especially in transmission grid servitudes and environmental issues.

The *Contractor* is responsible for setting out the works as shown on the drawings. The *Contractor* is responsible for ascertaining the positions of any existing services within the line.

6.2 Building works

Reference could be made to the latest Model Trade Preambles published by the Association of South African Quantity Surveyors. However these have been developed for use with the JBCC series of contracts and an approach where description of the work is made part of the bill of quantities, which is not the case in other forms of contract. Only parts of the Model Trade Preambles could be referenced by an ECC contract, with a covering note dealing with the changes in terminology. Further changes are required depending on which parts are to be selected.

This subsection would typically comprise

- a) Particular specifications provided by the *Employer*
- b) List of standardised specifications applicable to the *works* and
- c) Variations to the standardised specifications

6.3 Civil engineering and structural works

Civil Engineering

The SANS 1200 Series of Specifications are applicable to all Civil Engineering and Structural works associated with this contract. The following Interpretations and meanings shall apply:

In case of any conflict in interpretation, ambiguity or discrepancy between any SANS 1200 Specification (whether standard or written as a particular project specification) contained in the Works Information and the conditions of contract, the conditions of contract take precedence within the ECC3 contract.

In case of any conflict in interpretation, ambiguity or discrepancy between any SANS 1200 Specification (whether standard or written as a particular project specification) contained In this paragraph 4.3 of the Employer's Works information and specific statements contained elsewhere in C3.1 Employer's Works Information, the specific statements contained elsewhere shall prevail, without prejudice to the Project Manger's express duty to resolve any ambiguity or inconsistency in the Works information under ECC3 Clause 17.1.

Variations to the standardized specifications

Within SANS 1200 A: GENERAL the following amendments and Interpretations shall apply:

Where the word or expression —Employer is used, read —Employer;

Where the word or expression —Contractor is used, read —Contractor

Where the word or expression —Engineer is used, read —Project Manager or ‘Supervisor’ as the context requires;

Where the word or expression —schedule of quantities is used, this is deleted in entirety.

Assessment and payment is in accordance with the conditions of contract (and the ECC3 main and secondary options stated therein);

Within SANS 1200 A: GENERAL 2.3 DEFINITIONS, the following apply:

—Acceptable, approved (Approval) is interpreted as either a Project Manager or a Supervisor communication or Instruction in relation to Works information compliance, consistent with the conditions of contract as the context requires;

—Adequate is deleted. The Project Manager notifies the Contractor where the Contractor has not complied with the Works Information;

—Measurement and payment and the further definitions contained within 6.3 (c) are deleted. Assessment and payment is in accordance with the conditions of contract (and the ECC3 main and secondary options stated therein);

Within SANS 1200 A: GENERAL 2.6 APPROVAL, the following applies:

—Approval by either the Project Manager and/or the Supervisor is without prejudice to ECC3 Clause 14.1 and 1 inter alia, ECC3 Clauses 13.1, 14.3, and 27.1.

SANS 1200 A: GENERAL 2.8 ITEMS IN SCHEDULE OF QUANTITIES, is deleted in entirety.

Assessment and payment is in accordance with the conditions of contract (and the ECC3 main and secondary options stated therein).

SANS 1200 A: GENERAL 3.2 STRUCTURES AND NATURAL MATERIAL ON SITE, applies only to the extent that it is consistent with paragraph 3.1.4 of C3.1 Employer’s Works Information. or expression —Plant is used, read —Equipment.

SANS 1200 A: GENERAL 7.2 CONTRACTORS OFFICES, STORES AND SERVICES, applies but the Project Manager resolves any inconsistency with statements included within paragraph 3.1.10 of C3.1 Employer’s Works Information.

SANS 1200 A: GENERAL 3.1 SURVEY, applies only to the extent that it is consistent with paragraph 3.1.11 of C3.1 Employer’s Works Information.

Within SANS 1200 A: GENERAL 3.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS, the following applies:

Where the word or expression —specification is used, read —Works Information.

SANS 1200 A: GENERAL 3.4 PROTECTION OF OVERHEAD AND UNDERGROUND

SERVICES applies only to the extent that it is consistent with the specific statements made elsewhere in C3.1 Employer’s Works Information and in any case and at all times consistent with the conditions of contract.

Within SANS 1200 A: GENERAL 5 TESTING, the following applies: Where the word or expression —Engineer is used, read —Supervisor.

SANS 1200 A: GENERAL 8 MEASUREMENT AND PAYMENT is deleted in entirety. Assessment and payment is in accordance with the conditions of contract (and the ECC3 main and secondary options stated therein).

The principles, meanings and interpretation stated and established within paragraphs 4.3.1 to

1. with respect to SANS 1200 series and to SANS 1200 A: GENERAL equally apply to the other SANS 1200 specification references used within this paragraph 4.3 of C3.1 Employer’s Works Information.

Title	Date or revision	Tick if publicly available
Eskom Standard Specifications		
Construction Safety, Health and Environmental Management 32-136	Latest Rev.	✓
Eskom Cardinal Rules 32-421	Latest Rev.	✓
Safety, Health and Environmental (SHE) Policy 32-94	Latest Rev.	✓
Smoking Procedure 32-36	Latest Rev.	✓
Vehicle and Driver Safety Management 32-93	Latest Rev.	✓
Eskom Vehicle Safety 32-345	Latest Rev.	✓
Working at Heights 32-418	Latest Rev.	✓
TST41-120 Environmental Requirements for the Procurement of Assets, Goods and Services.	Latest Rev.	✓
TST0015 Training, assessment and authorization of persons for the operation & maintenance of the Power System Contractor Safety in a High Voltage Environment	Latest Rev.	✓
TPC41-283 Non Conformance Procedure	Latest Rev.	✓
Occupational Health and Safety Act No. 85 of 1993	Latest Rev.	✓
TST41-168 Quality Requirements for Procurement of Assets, Goods & Services.	Latest Rev.	✓
Eskom Particular Specifications		
EPS 1 Specification for Earthmat	Attached	
EPS 2 Specification for Stone Surfacing of Yard	Attached	
EPS 3 Variations and Additions to Standardised Specifications	Attached	
Standardised Specifications		
SABS 1200 Standardised Specification for Civil Engineering Construction		✓
SANS 2001 CC1:2007 Construction Works Part CC1: Concrete Works (structural)		✓
SANS 2001 CS1:2007 Construction Works Part CS1: Structural steelwork		✓
SANS 121 Hot Dip Galvanized Coatings on Fabricated Iron and Steel Articles —Specifications and Test Methods		✓

6.4 Electrical & mechanical engineering works

These specifications are usually project specific and developed by the *Employer* to suit his operations. Either include these specifications here, or refer to them in attached Annexure. Check the specifications for inconsistencies in terminology and that they do not contain any provisions already dealt with in the chosen NEC *conditions of contract* or clash with them in any way.

6.5 Process control and IT works

Not applicable

6.6 Other [as required]

