

CAMDEN POWER STATION

WORKS INFORMATION

The *works* consist of providing Splicing and pulley lagging services required for the efficient running of the Camden Operating and Maintenance Operations (coal screens) for the period of 3 years 40 months at Camden Power Station.

WORKS INFORMATION

EMPLOYER's *OBJECTIVE*:

The Employer's objectives are to:

- Obtain Contractors to supply Splicing and pulley lagging services to Camden Power Station
 - Control the risk associated with conveyor failures within the Mobile Coal Screens Operations.
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Section 1	Description of the <i>works</i>
Section 2	Work to be performed by the <i>Contractor</i> for the <i>works</i>
Section 3	Work and things for the works supplied by the <i>Employer</i>
Section 4	Programme and planning
Section 5	Completion
Section 6	Site features requiring special attention
Section 7	Quality management
Section 8	Safety management
Section 9	Environmental management
Section 10	Site services and procedures

Section 1: Description of the works

The works is for Conveyor Belt Splicing, Pulley re-lagging and repair of Conveyor Belts on the Coal Screens (Kleeman MS 19 D) of Camden Power Station. The *contractor* shall have a dedicated team available on site that will be responsible for splicing, belt repairs and pulley lagging. The contractor will also be required to do conveyor belt and pulley lagging inspection and assist with idler replacements when they are not splicing belts or re-lagging pulleys.

The *Contractor* is required to supply all material, equipment and labour required to execute splicing and pulley lagging on the conveyors. The *Contractor* will be required to have splicing equipment dedicated for Medupi to ensure that if Medupi experiences splice failures that equipment is available immediately for the repair work to start.

1.1 BOUNDARY DEFINITIONS

Coal Screens

Boundary Start: Coal Screens at Coal Stock Yard

Section 2: Work to be performed by the Contractor for the works

2.1 Works

- 1 Providing a 24 hour Splicing, belt repair and Pulley lagging services to ensure the efficient running of the Camden Power Station Conveying Operations without interruptions
- 2 Provide a dedicated Camden team consisting of:
 - 1 x Splicing Supervisor
 - 1 x Senior splicer
 - 1 x Senior splicer
 - 2 x Splicing assistant
- 3 Team responsibilities
 - Day to day inspection of conveyor belting, splices, and pulley lagging
 - Assist with idler changing as and when required
- 4 Ensure that the Staff and Equipment meets the safety, health and environmental regulations and requirements at all times
- 5 The *Contractor* provides Equipment, tools and consumables for the effective operation of the *Works*

2.2.1 Splicing and Belt Repairs

- 1 On call out, the *Contractor* Supervisor shall be on site within 60 minutes, after being called out for assessment of work and planning
- 2 All splices on Steel Cord and Plied Textile belts shall be done using a cold press, unless otherwise agreed with the *Employer*
- 3 The *Contractor* will be responsible to supply their own equipment, required to do splicing and belt repairs, inclusive of Humidity meters and Shore hardness testers
- 4 All equipment to do splicing and belt repairs should be supplied by the *contractor*, including at least four 1.5 ton Lever Hoists and belt clamps for the belt sizes used at Camden. This will include a small generator for hand held electrical tools used in remote areas and all lighting equipment
- 5 Steel cord belt splicing should comply with SANS 485 'Conveyor belting - Splicing of steel cord reinforced conveyor belting', 2009 edition
- 6 Cold splicing of textile reinforced conveyor belt splicing should comply with SANS 484 part 1 'Conveyor belting - Step splicing for multi-ply textile-reinforced rubber covered conveyor belting Part 1 Cold-splicing method', 2009 edition

- 7 Camden Quality control plan (QCP) on conveyor belt splicing (F/E****/001) should be completed during splicing. Payment will only be done once the fully completed QCP is submitted to the relevant ESKOM personnel
8. Splicing equipment should be verified, calibrated and tested at intervals indicated in Table 1 below, unless written exemption is granted by the *Employer*. A copy of the calibration report from the press manufacturer or company approved by the manufacturer should be submitted to the *Employers representative* every 6 months, after which payment will be approved for that activity.
- 9 During adverse weather conditions such as rain and wind the *contractor* is to erect a shelter over the splice or repair area to keep out the elements
- 10 The *contractor* will not be paid for rework or any splice that fails within the guarantee period.
- 11 As per the SANS requirement the contractor will have to provide proof from the belt manufacturer that the compound that the contractor is using for belt splicing is compatible with the brand of belt that is being spliced. Camden screens currently uses Dunlop, Continental (Goodyear) Fenner and Interflex belting.

Table 1 Verification and testing requirements for splicing equipment

2.2.2 Pulley Lagging

- 1 The *Contractor* will be responsible to supply their own equipment and material required to do lagging of pulleys
- 2 All equipment to do pulley lagging should be supplied by the *contractor*, including at least four 1.5 ton Lever Hoists and spreader bars.
- 3 *Contractor* will be responsible to pull the belt away from the pulleys using their own equipment during the lagging process
- 4 Camden will only be responsible for de-tensioning of the belt
- 5 The Rubber lagging should consist of one continuous sheet and only the joint where the two ends of the lagging sheet meet, will be allowed. No joining of 'pieces' will be allowed on the pulley.

2.2.3 Guarantee Period

- 1 Materials and brands that will be used for the duration of the contract

NB Please note that failure to submit the information requested in the above paragraph 2.3.4, will be regarded as an incomplete tender and can lead to disqualification of the tender

2.2.4 Constraints on how the Contractor Provides the Works

- 1 Splicing will normally be done in predetermined splicing areas and the belt will be stopped to have the splice in that area
- 2 In the event that a conveyor belt has snapped, the Splice will have to be done at the point where it snapped. Eskom will however provide scaffolding in these areas if it is required
- 3 The splicing working will normally be planned to start during working hours and the contractor will be notified in advance of the plan
- 4 On certain conveyors work can only be done over weekends due to production constraints. The contractor is required to take this into consideration. It is expected that 80% of the work will be done during the week and 20% during weekends or callout
- 5 The contractor is required to be available for splicing on a 24 hour basis in case of failures
- 6 Due to production constraints the belt will not always be available at the exact time that it was planned. Since the contractor is expected to be onsite during normal working hours, no standing time will be paid if the belt is not made available for splicing on time
- 7 Rubber pulley lagging will be done in-situ with belt tension relieved
- 8 Pulley lagging is normally planned in advance and will normally not be done on an emergency basis

2.3 General

- 2 4 1 The *Contractor* provides Contracted Services as instructed by the Project Manager, according to the needs of the Employer
- 2 4 2 The Contractor informs the Employer within 24-hours in writing of any safety incident, injuries and/or damage to any property or employees
- 2 4 3 The Contractor fulfils his legal obligations to report certain incidents to the Department of Labour, or to keep records in terms of the OHS Act and the compensation for injuries and Diseases Act
- 2 4 4 The Contractor ensures that his Equipment is suitable to Provide the Works during inclement weather and provides his employees with protective clothing so that work may be efficiently carried out
- 2 4 5 The Contractor informs the Project Manager of intentions to stop work during inclement weather. The Contractor and the Project Manager assess the weather conditions with the intention to prevent the work from being stopped. The Contractor stops the work once the inclement weather causes a safety and health risk to employees exposed to the weather
- 2 4 6 The Contractor attends meetings arranged by the Project Manager
- 2 4 7 The Contractor completes records and submits these for acceptance to the Project Manager when work is done on site. As a minimum these records contains

Total people on Site

Total Equipment being used

- 2 4 8 All communications, including faxes and telexes are addressed as follows

Attention: The Project Manager or The Contractor (correspondence is not addressed to individuals as such, but may be marked for the attention of the relevant Project Manager or Contractor)
SPL 001 to xxx (From the Contractor's Office. Correspondence is numbered sequentially on the basis of the communication source)

- 2.4 9 All correspondence headings include:

Camden Power Station

The contract description

The contract number

The correspondence subject matter (Correspondence is delivered as a single package, with distribution being handled by the Project Manager in his organization or the Contractor in his organization)

2.5 Equipment

- 2 5 1 The Contractor shall ensure that

- a The contractor will be required to have splicing presses for the splicing of smaller belt and larger belt on site for the immediate use at Camden when required
- b The Contractor's Equipment supplied and used on the site complies with the Occupational Health and Safety Act, Act 85 of 1993 (as amended)

- c The Contractor provides consumables, spare parts and lubricants required for the maintenance of his Equipment
- d Splicing, Belt Repair and Pulley Lagging Equipment is maintained to ensure availability of 100%

2.6 Supervision and personnel

- 2 6 1 The Contractor lists his Supervisor as a key person in the Contract Data
- 2 6 2 The Contractor's Supervisor maintains a permanent presence on the site when work is performed During the abnormal working hours, when the Contractor's supervisor is not present on site, the contractor ensures that a senior employee, able to act on behalf of his supervisor, is on duty at the site
- 2 6 3 The Contractor's prove to the Project Manager that the employees used by the Contractor to provide the works are competent in their areas of responsibility
- 2 6 4 The Contractor provides the Project Manager with proof of legal appointments in terms of the Occupational Health and Safety Act, Act 85 of 1993 (as amended) for all the Contractor's employees who carry such legal responsibilities when on site.
- 2 6 5 The Contractor does not commence to provide the works unless the required letters of legal appointments have been accepted by the Project Manager

2.7 Specifications

- Finger splicing on width ply belt (supplier should be able to do belt tensioning, pulley Lagging, Supplier should supply belts as per below specifications As an when required

SPLICING OF CONYER BELT (AS AND WHEN REQUIRED) ON THE SCREENS AT CAMDEN POWER STATION

TYPES OF SPLICING

COLD SPLICE & CLIP JOINT

CANVAS HOT SPLICING

STEEL-CORD HOT SPLICING

SUPPLY AND REPLACE THE BELT IF FOUND TO BE WORN OUT OR DAMAGED COMPLETED (PORTION OR ENTIRE)

BELT SPECIFICATIONS

BRAND DUNLOP OR GOOD YEAR OR BMG

CLASS 315/3

BELT CONVEYER SIZE WIDTHS X LENGTH (MM)

FEEDER 1,200 X 3,500

MAIN FEEDING 1,050 X 11,800

TOP DECK 1,520 X 6,100

MIDDLE DECK 1,520 X 6,100

BOTTOM DECK 1,520 X 5,490

BOTTOM DECK UNDERFLOW 1,200 X 8,000

BOTTOM DECK OVERFLOW 800 X 10,300

MIDDLE DECK OVERFLOW 800 X 10,300

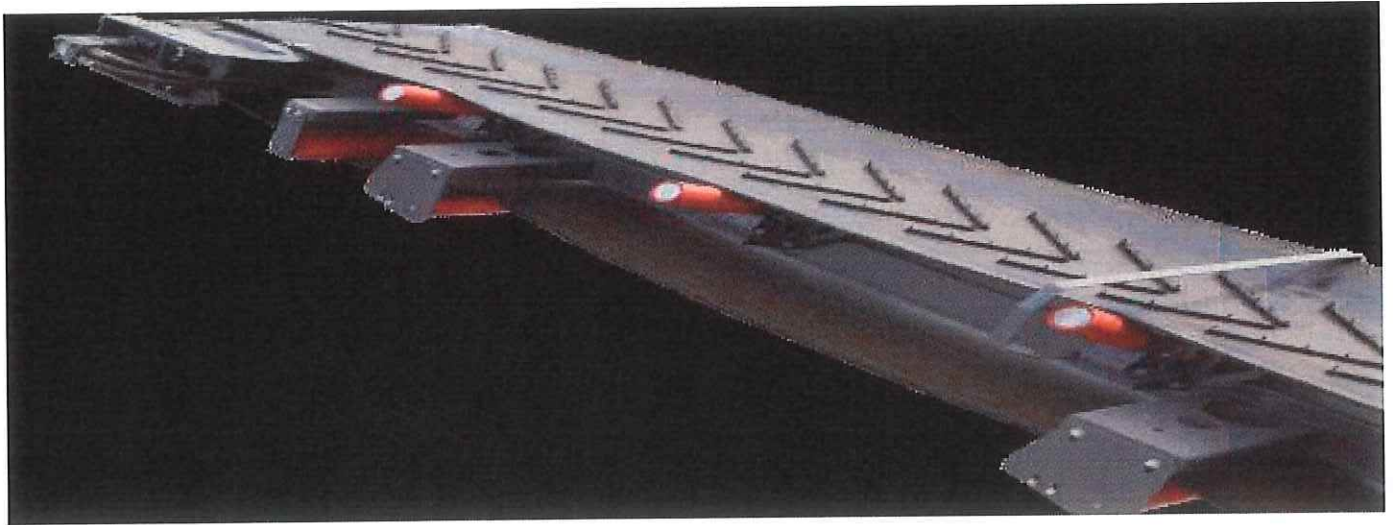
OVERSIZE FRACTIONS 650 X 1,800

TOP DECK OVERFLOW FRACTIONS 500 X 8,500

BELT THICKNES IS 15mm

All line to roll the old/removed belt and store it

Side Conveyor



Coal Screen with Conveyor Belts



2.8 Site location and arrangement

The Operating and Maintenance contract is located at Camden Power Station outside Ermelo in the Mpumalanga Province.

Section 3: Work and Services for the work supplied by the *Employer*

3.1 General

- 1 The *Employer* provides the labour ,equipment, tools and consumables for the pulling in of conveyor belting for the *Works*
- 2 The *Employer* provides access to the Site
- 3 The *Employer* provides induction training
- 4 The *Employer* provides identity permits for access control purposes
5. The *Employer* provides potable water and sanitary facilities on Site
- 6 The *Employer* informs the *Contractor* of any statutory requirements.
- 7 The *Employer* provides operational requirements
- 8 The *Employer* provides the *Contractor* with a matrix to clarify responsibilities and accountabilities at areas of interface with the *Employer* and Others
9. The *Project Manager* informs the *Contractor* of any changes to the operational requirements when the *Project Manager* becomes aware of the changes
10. The *Employer* provides all standard format documentation to be used for this contract
- 11 The *Employer* provides emergency fire fighting facilities
12. The *Employer* provides trained Supervisors to oversee Operations on Site

3.2 Site facilities provided by the *Employer*

3.2.1 Site Yard

- 1 The *Contractor* is supplied with an off-terrace yard, inside the Power Station security fence, for his use during the full period of his Site works
- 2 The *Contractor's* yard is subject to periodic inspection by the *Employer*
- 3 The *Contractor* evacuates and cleans the yard within 1 month from *Completion*

3.2.2 Supply of electricity

All points of supply requested by the *Contractor* are provided in terms of quantity and location at the discretion of the *Employer*

3.2.3 Lighting

The *Employer* provides general Plant lighting All other lighting is the responsibility of the *Contractor*

3.2.4 Water

The *Employer* supplies reasonable quantities of potable water required for the purposes of this contract free of charge The *Contractor* provides, at his own cost, all connection fittings, pipe work, temporary plumbing, and pumps necessary to lead the water from the *Employer's* points of supply to the various points where it is required The *Contractor* is responsible to maintain this equipment and to remove it on *Completion*

The *Employer* does not guarantee continuity of supply and the *Contractor* makes his own provision for standby supplies to maintain continuity of work. Claims of any nature relating to discontinuity of water supply are not considered.

1.1 SHE. Documentation Required from the *Contractor*

The following documents must be provided together with the tender by the *Contractor* in terms of Health, Safety and Environmental performance, should the *Contractor* not provide this information it will be assumed that it does not exist.

- Detailed costing for Health and Safety (Linked to Risk Assessment) based on the overall scope of work to be performed
- Letter of good standing with COID or any insurance body
- An Organogram indicating the names of all persons that will hold legal appointments on the project in terms of the Act
- The expected roles, responsibilities and authority of those who are proposed to receive legal appointments
- The resume'(s) of the proposed Safety Officer(s) and Environmental Officer(s) his/their roles, responsibilities and authority is required in terms of the scope of work
- The *Contractor's* company Safety, Health and Environment policy
- Provide an overview of the system/program that is utilized to manage Safety, Health and Environment
- Provide a detailed HIRA (Hazard identification and Risk Assessment) based on client specification and the scope of work
- Provide a composite Health and Safety Plan as per the Clients specification?
- Certificates of medical fitness and psychological fitness, where applicable, conducted in relation to the individuals person job specification (Linked to Risk Assessment)

1.2 Health and Safety Plan

Upon the award of the contract, successful *Contractor* must submit a Health and Safety Plan, filed in a Health and Safety File, comprising of the following

- Proof of the contracting company's own Health and Safety Policy
- Proof of appointments, assignments and designations as required in terms of the Occupational Health and Safety Act, No 85 of 1993
- Proof of Risk Assessments regarding Hazards identified
- Proof of Safe Work Procedures that derived out of the Risk Assessments
- Proof of the contracting company's own Emergency Plan that will deal with their own emergencies on site
- Proof of a Fall Protection Plan, if required to perform work at elevated levels developed by a competent person appointed by the contracting company
- Proof of an Induction Program. It is advised that the Camden SHE Rules are used as a guide and an attendance register signed by its employees prior the commencement of any construction work on site
- Proof of the contracting company's employees Medical Fitness Certificate (Must still be valid for one year and may only have been issued by an occupational health practitioner)
- Proof of *contractors* weekly Health and Safety Rep Inspections regarding its own site and where detached work is performed
- Proof of Personal Protective Equipment (PPE) issued to *contractor's* employees
- Proof of contracting company's Accident/Incident Reporting and Investigation System
- Proof of checklists and where applicable test certificates, regarding *contractor's* tools, equipment, machinery, mobile equipment, vessels under pressure and any other applicable checks required by the Act

The Safety Officer employed by Camden Power Station will audit these Health and Safety Plan to ensure compliance with the provisions of the Act. The approval of the health and safety plan can sometimes take 2 to 3 days to approve and no work will be conducted before the plan is approved. The *contractor* has to keep this in mind for their health and file costing.

1.3 Anticipated safety risks

- The contractor will sometimes be required to conduct splicing/lagging near running conveyor belts. This poses a significant risk of a personnel getting caught between the running conveyor belt and the idler, pulley or structure. Emergency pull ropes are provided along the length of the belt for emergency situations. The contractor there need take note of this and include it as part of the risk assessment.
- The contractor will work with very sharp blades and the necessary PPE need to be worn and training need to be done to avoid lacerations on workers.
- The splicing press is very hot 140 degrees and the necessary PPE need to be worn and training need to be done to avoid burns.
- Some of the work might be conducted in an elevated position and there is a falling hazard as well as hazard of object falling onto people working below. The *contractor* will compile a fall protection plan as part of his health and safety file and should strictly adhere to Camden Power Station Working at Heights Work Instruction.
- All normal plant PPE will be required like safety boots, hard hats, earplugs, dust masks, goggles, gloves and bright coloured reflective vests.

2. Environmental Rules

2.1 Environmental Management System

Camden Power Station has been recommended for ISO14001 2004 certificate. To ensure continual improvement to the ISO 14001 2004, the *Contractor* shall ensure that the following requirements are met -

- Identify all environmental aspects and impacts
- Identify the law that is applicable to the scope and ensure compliance to the applicable laws at all times
- All employees shall attend Environmental induction before commencing with the work

2.2 Waste management

All waste introduced to and/or produced on the *Employer's* premises by the Contractor for this contract, must be handled in accordance with National Environmental Management Waste act 59 of 2008 and Camden Waste management procedure.

2.3 Hazardous Chemicals substances

All hazardous Chemicals substances brought on site must be accompanied by Material Safety Data Sheet and shall be managed as per Occupational Health and Safety Act, 1993 Hazardous Chemical Substances Regulations, 1995.

2.4 Environmental Incident

The *Contractor* shall report all Environmental incidents (example Oil/Chemical spillage, water overflow etc) to MCamden Power Station contract manager or Environmental Officer within 24 hours of them occurring.

2.5 Other Environmental Requirements:

The *Contractor* will be required to ensure that the following environmental requirements are complied with at all times.

- 1 Zero liquid effluent discharge
- 2 No oil or waste will be dumped on an unauthorised area or unlicensed waste site
- 4 Asbestos will be handled and stored according to Act 15 of 1973 (hazardous substances Act)
- 5 No materials or waste will be burnt on site
- 6 *Contractors* shall comply with Medupi SHEQ policy

8.1 Entry:

1. The *Contractor* obtains entry permits, which are issued free of charge by security upon submission of the employee's valid identity documents, subject to *Employer's* applicable rules. The permits remain the property of the *Employer*.
2. The *Contractor* and his employees are always in possession of an entry permit to enable identification is made immediately.
3. The *Contractor* consents to the *Employer's* security searching and inspecting property belonging to the *Contractor* entering or remaining within the area.
4. The *Employer* requires a security clearance of all persons entering the area. The *Contractor* applies for the security clearance of its personnel 48 hours in advance of bringing the personnel to Site.
5. The *Contractor* obtains temporary permits only in cases of an emergency breakdown.

8.2 Permits:

- As per 8.1

8.3 Vehicles:

1. The *Contractor* proves to the *Project Manager* that all drivers of vehicles used by the *Contractor* to Provide the Works are in possession of the *Employer's* authorized driver's licenses.
2. The *Contractor* obtains vehicle permits for vehicles required to Provide the Works from the *Employer's* security department.
3. The *Contractor* obeys the instructions of the *Employer's* security personnel when the *Contractor's* vehicles and those of his Subcontractors are stopped for search and investigation purposes.
4. The *Contractor's* supplier's drivers identify themselves by means of a valid identity document and produce a delivery note addressed to the *Contractor*.

8.4 Equipment, Plant and Materials, tools and other things required to Provide the Works:

1. The *Contractor* inventories all Equipment, Plant and Materials, tools and other things required to Provide the Works entering the Site on the prescribed forms obtainable from the *Employer's* security. The original inventory is retained by security and the *Contractor* retains a duplicate copy of the inventory.
2. All Equipment, Plant and Materials, tools and other things required to Provide the Works brought into the Site by the *Contractor* is clearly marked and is not removed from the Site unless the *Contractor* identifies it as his property and the *Employer* accepted the removal.

8.5 General:

1. Security maintains discipline on Site and disciplinary action against traffic offenders needs to be implemented by the *Contractor* to the *Employers* satisfaction.
2. The *Contractor* does not permit personnel who are under the influence of drugs or alcohol to enter the Site.
3. Further information regarding security requirements is available from the security office at the main gate.

Section 9: Environmental management

- Camden Power Station is to be licensed to operate under the National Water Act (Act 36 of 1998), and all plant Operations, Maintenance and Engineering staff ensures that the license conditions detailed within the requirements of the act are met at all times
- The Employer is committed to meet the environmental regulations The Contractor to meet the following environmental requirements
 - a) Storm water
The Contractor ensures that clean and polluted storm water is and remains separated All drains are cleaned on a scheduled basis to ensure the drains working at all times All drainage channels and pipes are kept clean at all times and special attention is given to clean the drains after rain
 - b) Contaminated soil
All contaminated soil outside the contained stock yard is removed and dumped at a approved and demarcated area
 - c) General Control of Site Activities
The Site is controlled in an environmentally responsible manner Note the following
 - Noise and pollution levels for all construction Equipment is monitored and managed Equipment with oil leaks, excessive emission, or unacceptable noise levels are repaired or removed from Site
 - Temporary services are maintained in a good and proper manner
 - e) Plant & Material wash-down facilities
Wash down of plant and material can only be done in areas designated by the Project Manager
- The Contractor keeps records of maintenance tasks executed by the Contractor as specified by the original equipment manufacturers
- The Contractor interfaces with the Employer's personnel to execute specific operational tasks when and does not execute these tasks without prior permission from the Employer

Section 10: Accounts and records

10.1 Financial records and accounts

- 12 2 1 The Employer pays by bank transfer
- 12 2 2 The Contractor accepts the risk of incorrect bank transfers arising from changes to the Contractor's banking information
- 12 2 3 All payments are provisional and subject to audit
- 12 2 4 The Contractor preserves his records for such a period as the Department of Internal Revenue may require Should different periods be prescribed, the longest period applies, but in any event, records are retained by the Contractor for not less than five years.
- 12 2 5 The Project Manager deducts any amount owed by the Contractor to the Employer from any amount owed by the Employer to the Contractor

12.2.6 The *Contractor* submits original invoices complying with the Value Added Tax Act



Compiled by: Boitumelo Moeketsi

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