



NEC3 Engineering & Construction Contract

Between **ESKOM HOLDINGS SOC Ltd**
(Reg No. 2002/015527/30)

and **[Insert at award stage]**
(Reg No. _____)

for **Rosherville Superstore fire protection project**

Contents:	No of pages
Part C1 Agreements & Contract Data	[17]
Part C2 Pricing Data	[8]
Part C3 Scope of Work	[28]
Part C4 Site Information	[2]

CONTRACT No. [Insert at award stage]

Part C1: Agreements & Contract Data

Contents:	No of pages
C1.1 Form of Offer and Acceptance	[3]
[to be inserted from Returnable Documents at award stage]	
C1.2a Contract Data provided by the <i>Employer</i>	[12]
C1.2b Contract Data provided by the <i>Contractor</i>	[2]
[to be inserted from Returnable Documents at award stage]	
C1.3 Proforma Guarantees	[•]

C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Rosherville Superstore fire protection project

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options B	The offered total of the Prices exclusive of VAT is	R [●]
	Sub total	R [●]
	Value Added Tax @ 15% is	R [●]
	The offered total of the amount due inclusive of VAT is ¹	R [●]
	(in words) [●]	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s) _____

Capacity _____

For the tenderer: _____

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number (if applicable)

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

Name(s)

Capacity

**for the
Employer**

.....
(Insert name and address of organisation)

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]
6	[•]	[•]
7	[•]	[•]

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

For the Employer

Signature _____

Name _____

Capacity _____

On behalf of _____
(Insert name and address of organisation)

Name & signature of witness _____

Date _____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	B: Priced contract with bill of quantities
	and secondary Options	W1: Dispute resolution procedure
		X2: Changes in the law
		X4: Parent company guarantee (if applicable)
		X7: Delay damages
		X15: Performance bond (if applicable)
		X16: Retention
		X18: Limitation of liability
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Project Manager</i> is: (Name)	TBA
	Address	TBA
	Tel	TBA
	Fax	TBA
	e-mail	TBA
10.1	The <i>Supervisor</i> is: (Name)	TBA
	Address	TBA
	Tel No.	TBA

	Fax No.	TBA		
	e-mail	TBA		
11.2(13)	The <i>works</i> are	Eskom Rosherville Fire Protection and Fire Detection System Installation Project		
11.2(14)	The following matters will be included in the Risk Register	Not applicable		
11.2(15)	The <i>boundaries of the site</i> are	Eskom Rosherville site		
11.2(16)	The Site Information is in	Part 4: Site Information		
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.		
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa		
13.1	The <i>language of this contract</i> is	English		
13.3	The <i>period for reply</i> is	One (1) week		
2	The Contractor's main responsibilities	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.		
3	Time			
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	6 months after the start date		
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date	
		1	SHE plan	To be submitted 2 days after the contract start date
		2	Project programme	5 days within Contract start date.
		3	Engineering design	10 days within Contract start date
30.1	The <i>access dates</i> are:	Part of the Site	Date	
		1	Start date	TBA
		2	Access date	TBA
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	One (1) week of the Contract Date.		
31.2	The <i>starting date</i> is	TBA		
32.2	The <i>Contractor</i> submits revised			

	programmes at intervals no longer than	Four (4) weeks.
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	
4	Testing and Defects	
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the <i>works</i>.
43.2	The <i>defect correction period</i> is	Within 1 week upon notification of defect unless otherwise stated by the Project Manager
	except that the <i>defect correction period</i> for	Not applicable
	and the <i>defect correction period</i> for	Not applicable
5	Payment	
50.1	The <i>assessment interval</i> is	between the 20th and the 25th day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	30 days upon submission of a certified tax complaint invoice to Eskom Financial Shared Services.
51.4	The <i>interest rate</i> is	the publicly quoted prime rate of interest (calculated on a 365-day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands.
6	Compensation events	
60.1(13)	The place where weather is to be recorded is:	Eskom Rosherville Site
	The <i>weather measurements</i> to be recorded for each calendar month are,	the cumulative rainfall (mm)
		the number of days with rainfall more than 10 mm
		the number of days with minimum air temperature less than 0 degrees Celsius
		the number of days with snow lying at 09:00 hours South African Time
		and these measurements:
	The <i>weather measurements</i> are supplied by	The Contractor using actual weather readings from the established site
	The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:	The nearest weather station of the South

	and which are available from:	African Weather Service to the site the South African Weather Bureau and included in Annexure A to this Contract Data provided by the <i>Employer</i>
7	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	None
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
B	Priced contract with bill of quantities	
60.6	The <i>method of measurement</i> is	As stated in Part C2.1, Pricing Assumptions.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Midrand South Africa
	The person or organisation who will choose an arbitrator.	
	• if the Parties cannot agree a choice or • if the arbitration procedure does not state who selects an arbitrator, is	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	

X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
X4	Parent company guarantee	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
X7	Delay damages (but not if Option X5 is also used)	
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	R500.00 per day up to a limit of 10% of the contract value.
X13	Performance bond	
X13.1	The amount of the performance bond is	10% of the contract value (if applicable)
X16	Retention	
X16.1	The <i>retention free amount</i> is	R0
	The <i>retention percentage</i> is	10%
X18	Limitation of liability	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	The total of the prices.
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	the amount of the deductibles relevant to the event
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The greater of • the total of the Prices at the Contract Date and 1. the amounts excluded and unrecoverable from the <i>Employer's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the <i>works</i>, Plant and Materials),

		• death of or injury to a person and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	(i) Five (5) years after the <i>defects date</i> for latent Defects and (ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter. A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i>, without requiring any inspection not ordinarily carried out by the <i>Employer</i> or the <i>Supervisor</i> during that period. If the <i>Employer</i> or the <i>Supervisor</i> do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the <i>Employer</i> or the <i>Supervisor</i> to have discovered the Defect.
Z	The Additional conditions of contract are	Z1 to Z15 always apply.
Z1	Cession delegation and assignment	
Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .	
Z1.2	Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.	
Z2	Joint ventures	
Z2.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of this contract.	
Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Project Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.	
Z2.3	The <i>Contractor</i> does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the <i>Employer</i> having been given to the <i>Contractor</i> in writing.	
Z3	Change of Broad Based Black Economic Empowerment (B-BBEE) status	
Z3.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.	

- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws

and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and

- undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z6.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

Z7.1 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 in accordance with the *Employer's* procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

Z8.1 Delete from the last sentence in core clause 61.3, "unless the *Project Manager* should have notified the event to the *Contractor* but did not".

Z9 Employer's limitation of liability

Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9.2 The *Contractor's* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer's* liability under the indemnity is limited.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

Z10.1 or had a business rescue order granted against it.

Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)

Z11.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor's* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the

Termination Table.

Z12 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,

Coercive Action means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,

Collusive Action means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,

Committing Party means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor's employees,

Corrupt Action means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,

Fraudulent Action means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,

Obstructive Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and

Prohibited Action means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z12.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.

Z12.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z12.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z13 Insurance

Z 13.1 Replace core clause 84 with the following:

Insurance cover

84

- 84.1** When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 84.2** The *Contractor* provides the insurances stated in the Insurance Table A.
- 84.3** The insurances provide cover for events which are at the *Contractor's* risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage to the works, Plant and Materials	The replacement cost where covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, at Contract Date, where covered by <i>Employer's</i> insurance
Loss of or damage to Equipment	The replacement cost
Liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract	<u>Loss of or damage to property</u> <u><i>Employer's property</i></u> The replacement cost where covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, at Contract Date, where covered by <i>Employer's</i> insurance. <u><i>Other property</i></u> The replacement cost. <u>Bodily injury to or death of a person</u> The amount required by applicable law
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z 13.2

Replace core clause 87 with the following:

The *Employer* provides the insurances stated in the Insurance Table B.

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum of indemnity
Assets All Risk	Per the insurance policy document

Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

Z14 Nuclear Liability

- Z14.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa and is the holder of a nuclear licence in respect of the KNPS.
- Z14.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.3 Subject to clause Z14.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z15 Asbestos

For the purposes of this Z-clause, the following definitions apply:

- AAIA** means approved asbestos inspection authority.
- ACM** means asbestos containing materials.
- AL** means action level, i.e., a level of 50% of the OEL, i.e., 0.1 regulated asbestos fibres per ml of air measured over a 4-hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
- Ambient Air** means breathable air in area of work with specific reference to breathing zone,

which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.

Compliance Monitoring means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

OEL means occupational exposure limit.

Parallel Measurements means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.

Safe Levels means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

Standard means the *Employer's* Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.

SANAS means the South African National Accreditation System.

TWA means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4-hour continuous period, also applicable to short term exposures, i.e., 10-minute TWA.

Z15.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short-term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

Z15.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are affected by an independent, competent, and certified occupational hygiene inspection body, i.e., a SANAS accredited, and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance, the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

Z15.3 The *Employer* manages asbestos and ACM according to the Standard.

Z15.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented, and relevant air monitoring conducted in order to declare the area safe.

Z15.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.

Z15.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the

Asbestos Regulations, 2001.

- Z15.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the *Contractor*.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience:	CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:	
31.1	The programme identified in the Contract Data is	
B	Priced contract with bill of quantities	
11.2(21)	The <i>bill of quantities</i> is in	

11.2(31)	The tendered total of the Prices is	(in figures) (in words), excluding VAT

PART 2: PRICING DATA

ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	3
C2.2	The <i>bill of quantities</i>	5

C2.1 Pricing assumptions: Option B

1. How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract (ECC3) Option B states:

Identified and defined terms	11	
	11.2	(21) The Bill of Quantities is the <i>bill of quantities</i> as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.
		(28) The Price for Work Done to Date is the total of - the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate and - a proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed. Completed work is work without Defects which would either delay or be covered by immediately following work.
		(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

2. Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

3. Guidance before pricing and measuring

Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

There is no general provision in Option B for payment for materials on Site before incorporation into the *works*. If secondary Option X14 Advanced payment has not been used then the tendering contractor may obtain the same effect by inserting appropriate items in the method related charges where the *method of measurement* allows, or alternatively making allowance in the rates of the *bill of quantities* for the financing of Plant and Materials until they are incorporated in the *works*.

When compensation events arise, the default position is that the Bill of Quantities is not used to calculate the cost effect of the event. Defined Cost and the resulting Fee is used and Defined Cost includes all components of cost which the *Contractor* is likely to incur, including so called P & G items. Rates and lump sums from the Bill of Quantities, or from any other source, may be used instead of Defined Cost and the Fee only if the *Contractor* and *Project Manager* agree. If they are unable to agree, then Defined Cost

plus Fee is used.

4. Measurement and payment

4.1. Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
sum	Lump sum
t	tonne (1000kg)

4.2. General assumptions

- 4.2.1. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.
- 4.2.2. The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.
- 4.2.3. An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.
- 4.2.4. The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due.
- 4.2.5. The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

4.3. Departures from the *method of measurement*

4.3.1.

4.4. Amplification of or assumptions about measurement items

The following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

4.4.1.

C2.2 the *bill of quantities*

ROSHERVILLE SUPERSTORE FIRE PROTECTION _ BILL OF QUANTITIES

No	Description	Unit	Qty	Rate	Total
1	PRELIMINARY & GENERAL ITEMS				
1.1	OVERHEAD FOR PROJECT (This includes Site Establishment Overhead Costs, Office Overheads, Administration Costs etc.)	Sum	1		
1.2	SHEQ Management, OHSA appointments, PPE etc.	Sum	1		
1.3	Supervisor	Day	132		
1.4	Safety Officer	Day	132		
Sub-Total (carried over to Summary)					
Transport					
1	Transport	Unit	QTY	Rate	Amount
1.1	LDV	km	13200		
1.2	Personnel Transport for Staff	km	13200		
Sub-Total (carried over to Summary)					

Notes to Tenderer:

- 1 The estimated quantities are subject to re-measure.
- 2 Tenderer to provide detailed breakdown for the lump sum items as and when requested.
- 3 Transport will be assessed based on logbook verified by Supervisor and approved by the Project Manager.
- 4 The tenderer needs to read scope of works together with the price schedule to ensure they price comprehensively.
- 5 The Tenderers to ensure that materials used for pricing are SANS or SABS approved. Specification will be requested.

2	<u>FIRE PROTECTION INSTALLATION</u>				
	Design, manufacture, works testing, supply and delivery to site, moving into position, erection, connecting up, site testing, witness testing, proving to the inspectors, demonstrating to the engineer and maintenance team of the complete installation as per conditions of contract, the specification in the bills and on drawings.				
2.1	Fire Hydrants & Hose Reels Pump skid mounted set consisting electric duty and standby diesel pumps duty 2400 LPM @ 600kPa Jockey pump duty 1.0 Litres/sec @ 800kPa. Pump set to be complete with triple pump start test arrangement, control panel with status indicators specified, 2 hours diesel day tank with bund container for spilt fuel, batteries, isolating and strainer valves, pressure switches, pressure gauges horn & flashing beacons and other accessories to make a complete installation. Assembly to have 200 litres surge pressure vessel. Pumps to have ASIB test certificate.	Item	1		
2.2	Black mild victaulic grooved jointed steel pipework for fire hydrants and hose reel to SANS 62 with one coat rust inhibitor and two coats firemen's red code A11 paint. Pipework to include supports, bends, reducers, flanges, and all pipe accessories to make a complete installation.				
i	25 mm	m	250		
ii	50 mm	m	50		
iii	80 mm	m	120		
iv	100 mm	m	750		
v	150 mm	m	130		
vi	250 mm	m	25		
2.3	Black mild steel pipework for sprinkler system to SANS 62 with one coat rust inhibitor and two coats firemen's red code A11 paint. Pipework to include supports, bends, reducers, flanges and all pipe accessories to make a complete installation.				
i	32 mm	m	160		
ii	40 mm	m	160		
iii	50 mm	m	200		
iv	80 mm	m	96		
v	100 mm	m	110		
vii	150 mm	m	60		
viii	Drain cock as 20mm NB isolating ball valve at 80mm dropper base	No.	24		
2.4	ESFR FM approved pendent sprinkler heads complete with stainless steel guards, K=24.2, Temp.= 68deg C, NB=20mm	No.	400		
2.5	PN16 Valves for fire protection use shall be ASIB, UL or FM approved brand with tracable part number and nominal bore as stated in the bills all painted fireman's red code A11				
i	25 mm NB complete with ball float valve for incoming cold-water supply	No.	2		
ii	100 mm NB gear operated isolating test pipe valve	No.	2		
iii	250 mm NB gear operated butterfly isolating valve	No.	2		
v	25 mm NB ball type isolating drain valves	No.	18		
vii	50 mm NB ball type isolating valve	No.	3		
2.6	2400 LPM flow test metering device to be fitted on the pump to tank test pipework	No.	1		
2.7	65 mm outlet fire hydrant with handwheel opening mechanism. Hydrant to have a horizontal screwed connection to the 80mm dropper.	No.	17		
2.8	Swing Type Fire Hose Reel to comply with SANS 543 complete with 25 mm chrome plated isolating valve. Fire hose reels shall be fitted with a 30m long reinforced red rubber hose of internal diameter of 20mm nominal bore, with a 4.8mm internal diameter aluminium nozzle and chrome plated brass isolating valve. Fire hose reel pipes above ground shall be colour coded signal red A11.	No.	2		

2.9	Wall Type Fire Hose Reel to comply with SANS 543 complete with 25 mm chrome plated isolating valve. Fire hose reels shall be fitted with a 30m long reinforced red rubber hose of internal diameter of 20mm nominal bore, with a 4.8mm internal diameter aluminium nozzle and chrome plated brass isolating valve. Fire hose reel pipes above ground shall be colour coded signal red A11.	No.	34		
2.10	2kg CO ₂ fire extinguisher complying with the requirements of SANS 1567. Extinguishers to hung at position as shown on the drawings complete with meranti backing board.	No.	2		
2.11	9 kg Dry Chemical powder fire extinguisher complying with the requirements of SANS 1910. Extinguishers to hung at position as shown on the drawings complete with meranti backing board.	No.	68		
1.12	14,640 x 4,880 x 2,440 mm high galvanised mild steel sectional tank effective capacity 144m3 complete with subdivision step ladders, level indicators, 2 No. 250dia flanged vortex inhibitors, outlets, overflows as shown on the drawings and as necessary to have a complete assembly.	Item	1		
2.13	Fire brigade breaching double inlet complete with storz suction hydrant adaptor valve, non-return valve, isolating valves, gauge and fittings as detailed on the drawing	Item	1		
2.14	Fire signage as indicated on the drawings. Marking and signposting shall be of the photoluminescent type and shall comply with the relevant sections of SANS 1186.				
i	Framed 290 mm Type E1/E2 back to back	No.	9		
ii	Framed 290mm Type E3	No.	12		
iii	Framed 190mm Type E3	No.	3		
iv	Framed 290 mm Type F1	No.	17		
v	Framed 290mm Type F4	No.	17		
vi	Framed 190mm Type F5	No.	2		
vii	Framed 190mm Type F6	No.	2		
viii	Framed 190mm Type F4	No.	2		
ix	Framed 290mm Type F18/21 back to back	No.	1		
x	Framed 290 mm Type F15	No.	1		
xi	Type F45-FIRE EXIT/KEEP CLEAR	No.	10		
xii	Framed weather proof 290mm Type F49/F38 on 1800mm high gms support	No.	1		
xiii	Framed weather proof 600 x 600 mm TYPE GA 26-ASSEMBLY POINT on 1800mm high gms support	No.	2		
	Sprinkler Fire Water Storage Tank				
2.15	Strip out old 265kl existing fire water tank and remove from site as directed by client	Item	1		
2.16	The Supplier must prepare ground/ area for installation of new tank on existing foot print 4m radius.	Item	1		
2.17	Design 265kl galvanized cylindrical water storage tank 4m radius.	Item	1		
2.18	Supply new 265kl galvanized cylindrical water storage tank 4 m radius.	Item	1		
2.19	Install new 265kl galvanized cylindrical water storage tank.	Item	1		
2.20	Reconnect new water tank with existing water inlet and outlet pipework. Also supply necessary gate valves (drainage, inlet), inlet valve (ball valve) and gaskets required.	Item	1		
2.21	Paint new connections with signal red SANS 1091 compliance	Item	1		
2.22	Test new installation for leaks and commission.	Item	1		
2.22	Testing and commissioning to the satisfaction of the engineer	Item	1		
2.24	Preparation of Operating manuals/all technical drawings (as built drawings) and Maintenance Manuals	Item	1		
2.25	Allow for training of user client staff	Item	1		
	Sub-Total (carried over to Summary)				
3	FIRE DETECTION INSTALLATION				
*	Supply, install and connect inclusive of all fixing materials, wastage, and sundries. CLASS A wiring method. Equipment to be Ziton type or similar and equal approved. NB: inclusive of all necessary equipment such as cherry picker, scaffolding, etc				

*	Installation to comply in full with SANS10139 and applicable standards				
*	Standby Battery supplies for any part of the system shall be capable of maintaining the system in normal operation for at least 24 h, after which there shall be sufficient capacity to operate all sounders in evacuation mode for at least 30 min.				
3.1	4-loop Addressable firepanel, incl. battery back-up, network card, auto dialer, local sounder, logbook and holder.	No	1		
3.2	Addressable Fire Panel Accessory - Network Printed Circuit Board	No	1		
3.3	Addressable Fire Panel Repeater Small Cabinet English	No	3		
3.4	Addressable Fire Panel ACC - LED IND - 24 Z	No	6		
3.5	Battery 12 V 7.2 Ah (for 2010-1/-2 fire panels only, use BS127N-A for all other applications)	No	4		
3.6	Ceiling: Optical sensor [ZP730-2] c/w surface mounting sensor base [ZP7-SB1]	No	40		
3.7	Void: Optical sensor [ZP730-2] c/w surface mounting sensor base [ZP7-SB1]	No	40		
3.8	Manual Call point (RED), surface base, resettable element, LED indication - Fire Exits	No	30		
3.9	Manual Call point (GREEN), surface base, resettable element, LED indication	No	1		
3.10	Combination beacon / sounder, recessed base	No	30		
3.11	Loop Isolators, CLASS A wiring method	No	3		
3.12	Line Relays - Interface to Mechanical System	No	3		
3.13	Line Relays - Interface to Automated sliding doors, smoke curtain, access-controlled doors, etc	No	1		
3.14	Line Interface units	No	2		
3.15	Beam detector (transmitter) and Reflector (receiver) installed 1200mm above the top of the crane. Range from 50 – 110 m. Video-based type	No	26		
3.16	Supply and Installation of loop PH30 Fire Resistant Cable 2 Core, 1.5mm wiring and cable trunking (P8000 with covers and hangers) - 200m roll	No	5		
3.17	P8000 cable trunking (WxH: 76 x 76mm); hangers c/w nuts and bolts, bends, tees etc.	No	300		
3.18	25mm PVC conduiting c/w hangers, saddles, screws, nuts and bolts, bends, tees etc.	No	600		
3.19	25mm bosal conduiting c/w hangers, saddles, screws, nuts and bolts, bends, tees etc.	No	800		
3.20	Allow for inspection(s), testing and commissioning of the complete fire detection installation	Sum	1		
3.21	Other - Contractor to specify	Sum	1		
4	DECOMMISSIONING OF EXISTING SERVICES				
4.1	Allow for decommissioning of existing services and removal of rubble from site.	Sum	1		
Sub-Total (carried over to Summary)					

<u>SUMMARY</u>	
PRELIMINARY & GENERAL ITEMS	R
FIRE PROTECTION SYSTEM	R
FIRE DETECTION INSTALLATION	R
TOTAL (excl. 15% VAT)	R

.....

SIGNED

.....

NAME

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's Works Information</i>	27
C3.2	<i>Contractor's Works Information</i>	2
	Total number of pages	30

C3.1: EMPLOYER'S WORKS INFORMATION

Contents

Part 3: Scope of Work	1
C3.1: Employer's works Information	2
1 Description of the works	4
1.1 Executive overview	4
1.2 <i>Employer's</i> objectives and purpose of the works	4
1.3 Interpretation and terminology	4
2 Management and start up.	5
2.1 Management meetings	5
2.2 Documentation control	5
2.3 Health and safety risk management	5
2.4 Environmental constraints and management	5
2.5 Quality assurance requirements	5
2.6 Programming constraints	6
2.7 <i>Contractor's</i> management, supervision and key people	6
2.8 Invoicing and payment	6
2.9 Insurance provided by the <i>Employer</i>	6
2.10 Contract change management	7
2.11 Provision of bonds and guarantees	7
2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the <i>Contractor</i>	7
2.13 Training workshops and technology transfer	7
3 Engineering and the <i>Contractor's</i> design	7
3.1 <i>Employer's</i> design	7
3.2 Parts of the works which the <i>Contractor</i> is to design	7
3.3 Procedure for submission and acceptance of <i>Contractor's</i> design	7
3.4 Other requirements of the <i>Contractor's</i> design	7
3.5 Use of <i>Contractor's</i> design	7
3.6 Design of Equipment	7
3.7 Equipment required to be included in the works	8
3.8 As-built drawings, operating manuals and maintenance schedules	8
4 Procurement	9
4.1 People	9
4.1.1 Minimum requirements of people employed on the Site	9
4.1.2 BBEE and preferencing scheme	9
4.1.3 4.1.3 Supplier Development, Localisation and Industrialisation (SDL&I) Undertaking	9
4.2 Subcontracting	9
4.2.1 Preferred subcontractors	9
4.2.2 Subcontract documentation, and assessment of subcontract tenders	9
4.2.3 Limitations on subcontracting	9
4.2.4 Attendance on subcontractors	9
4.3 Plant and Materials	9
4.3.1 Quality	9
4.3.2 Plant & Materials provided "free issue" by the <i>Employer</i>	9
4.3.3 <i>Contractor's</i> procurement of Plant and Materials	9
4.3.4 Spares and consumables	10
4.4 Tests and inspections before delivery	10
4.5 Marking Plant and Materials outside the Working Areas	10
4.6 <i>Contractor's</i> Equipment (including temporary works).	10
4.7 Cataloguing requirements	10
5 Construction	11
5.1 Temporary works, Site services & construction constraints	11

5.1.1	<i>Employer's</i> Site entry and security control, permits, and Site regulations	11
5.1.2	Restrictions to access on Site, roads, walkways and barricades	11
5.1.3	People restrictions on Site; hours of work, conduct and records	11
5.1.4	Health and safety facilities on Site	11
5.1.5	Environmental controls, fauna & flora, dealing with objects of historical interest	11
5.1.6	Title to materials from demolition and excavation	11
5.1.7	Cooperating with and obtaining acceptance of Others	11
5.1.8	Publicity and progress photographs	11
5.1.9	<i>Contractor's</i> Equipment	11
5.1.10	Equipment provided by the <i>Employer</i>	11
5.1.11	Site services and facilities	11
5.1.12	Facilities provided by the <i>Contractor</i>	11
5.1.13	Existing premises, inspection of adjoining properties and checking work of Others	12
5.1.14	Survey control and setting out of the <i>works</i>	12
5.1.15	Excavations and associated water control	12
5.1.16	Underground services, other existing services, cable and pipe trenches and covers	12
5.1.17	Control of noise, dust, water and waste	12
5.1.18	Sequences of construction or installation	12
5.1.19	Giving notice of work to be covered up	12
5.1.20	Hook ups to existing works	12
5.2	Completion, testing, commissioning and correction of Defects	12
5.2.1	Work to be done by the Completion Date	12
5.2.2	Use of the <i>works</i> before Completion has been certified	12
5.2.3	Materials facilities and samples for tests and inspections	12
5.2.4	Commissioning	12
5.2.5	Start-up procedures required to put the <i>works</i> into operation	13
5.2.6	Take over procedures	13
5.2.7	Access given by the <i>Employer</i> for correction of Defects	13
5.2.8	Performance tests after Completion	13
5.2.9	Training and technology transfer	13
5.2.10	Operational maintenance after Completion	13
6	Plant and Materials standards and workmanship	14
6.1	Investigation, survey and Site clearance	14
6.2	Building works	14
6.3	Civil engineering and structural works	14
6.4	Electrical & mechanical engineering works	15
6.5	Process control and IT works	15
6.6	Other [as required]	15
7	List of drawings	16
7.1	Drawings issued by the <i>Employer</i>	16
C3.2	<i>Contractor's</i> Works Information	17

1 Description of the works

1.1 Executive overview

The Rosherville Superstore fire protection project was found necessary to implement after a fire safety evaluation report that revealed several shortfalls of the existing fire protection interventions.

The superstore building located at 26.23° S, 28.11° E in Rosherville, Johannesburg, Gauteng. It is a single-story building with mezzanine floor offices and a parking lot. Is in good structural condition and has existing sprinkler protection installation that is served from a pump station and fire water storage tanks. Fire hydrants and fire hose reels are currently being served from municipal mains that have become unreliable to serve as the primary fire-fighting water source.

The scope of work to be conducted by the contractor includes supply, install and commission an upgraded fire protection system that shall have a dedicated hydrants and fire hose reels water storage tank and pumps as primary fire fighting systems to support the existing sprinkler installation. One circular existing 265kL sprinkler water storage tank, that is leaking, shall be dismantled and replaced by a similar capacity circular tank that shall be supported on the same footprint as the existing one as part of this scope of work. The scope shall also include some detection and fire alarm system for the whole warehouse and office space. Fire extinguishers and statutory fire signage installation shall form part of the scope of work.

1.2 Employer's objectives and purpose of the works

The Scope of Work (SoW) comprises the design, manufacture, works testing, supply and delivery to site, moving into position, erection, connecting up, site testing, witness testing, proving to the inspectors, demonstrating to the engineer and maintenance team of the complete installation as per conditions of contract, as per the specification in the bills and on drawings as follows:

- 1) Site assessment of the municipal water supply to the fire hydrants and hose reel to ascertain pressure and flow.
- 2) Fire pumps.
- 3) Fire water storage tank for hydrants and hose reel.
- 4) Fire brigade breaching inlet.
- 5) Fire hydrants.
- 6) Fire hose reels.
- 7) Fire extinguishers
- 8) Fire signage.
- 9) In-rack sprinkler installation.
- 10) Associated pipework.
- 11) Smoke detection & fire alarm system.
- 12) Dismantle 1 No. existing 265kL circular sprinkler system fire water storage tank and replace

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
ECSA	Engineering Council of South Africa
DX	Distribution
NEC	New Engineering Contract

UPS	Un-interruptible power supply
SANS	South African National Standards

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:
Risk register and compensation events	Monthly on Thursday at 10:00	MS Teams	<i>Employer, Contractor,</i>
Overall contract progress and feedback	Monthly on Thursday at 10:00	MS Teams/ Palm Spring CNC Site	<i>Employer, Contractor,</i>

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

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.

2.2 Documentation control

All correspondence is to be addressed to the Project Manager with a chronological numbering system.

2.3 Health and safety risk management

The *Contractor* shall comply with the health and safety requirements in accordance with the Occupational Health and Safety (OSH) Regulations act (85 of 1993). The Supplier shall comply with Eskom's SHE specification.

2.4 Environmental constraints and management

The Supplier shall comply with the environmental criteria and constraints as per South African Legislation and requirements stipulated in the Tender.

2.5 Quality assurance requirements

The Contractor to be ISO-9001 compliant and comply with Eskom's Supplier Quality Management Specification, DI: 240-105658000.

2.6 Programming constraints

The Contractor must submit a detailed works programme within one (1) week of Contract award date. The Primavera or MS Project version/ format must be used to submit the programme.

2.7 Contractor's management, supervision and key people

The Contractor is to submit an organogram showing all key people involved in the contract 7 days after contract award. All key personnel must be appointed in writing, must be current for the specific site and area of work and must be kept on file. This would be essential if the Contractor is a Joint Venture.

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.
- Goods receipt number

Procedure for Invoice Submission and Payment (e.g. Electronic Payment Instructions):

General Information	X
- No Pro-forma Invoice	
- Check Vendor number against the Address and name on Tax invoice	
- Insert the Vendor number on Tax invoice (Top right-hand corner)	
- Bank details must be on the invoice or on a attach sheet, but it does not require a bank stamp just a letter)	
- Check banking details on invoice against SAP system. If more than one banking account check bank account against banking details on invoice. If banking details not on invoice, write the bank code next to the vendor account (bank code 0002)	
- Check Vendor VAT number against the vendor master. (FK03) If VAT number not on master records, prepare a list and forward to Vendor Management to check and update the vendor master records	
- No fax copies of Tax invoices allowed	
- No copies of Tax invoices allowed unless originally printed by the Vendor if a photocopy tax invoice, it must be an original "certified copy" (i.e., not a copy of a "certified copy" invoice) from the vendor and check in system if not previously be paid. Put stamp "not previously paid" on invoice and sign.	
- Ensure that date received stamp is clear on invoice	
- Stamp all Invoices with the Vat stamp, complete and sign (only when VAT is applicable)	
- The stamp should not be stamped over any written information	
- When scanning invoice, check the quality before linking in SAP (inboxes)	
With Reference Invoices	X
- Goods receipt must be done (payment with reference)	
- Ensure that the SAP purchase order number is clear and correct on the invoice	
- GR number to be written on the Invoices	
- If multiple lines on invoice write the line number of the order against the line to ensure that the processors match the correct lines (to ensure that 191100 is matched correctly)	

2.9 Insurance provided by the Employer

As stated in the General ACAR Confirmation Insurance



Confirmation of
insurance cover - Esk

2.10 Contract change management.

The ECC mechanism will be applied for change management of the Contract.

2.11 Provision of bonds and guarantees.

Not Applicable

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

The Contractor must keep records of support document of compensation event. These records must be made available to the Employer for Contract purpose.

2.13 Training workshops and technology transfer

Not Applicable

3 Engineering and the Contractor's design

3.1 Employer's design

Not Applicable

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

Not Applicable

3.3 Procedure for submission and acceptance of Contractor's design

Not Applicable

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

Upon completion of all the upgrades, the Contractor submits data packs for review and close out. As a minimum, the data pack must include the following:

- Document List
- Approved ITP
- As-Built Drawings
- Material Certificates
- Concrete Mix designs
- Test results
- Notifications
- Modifications
- Concessions
- Method statements and specification adhered to
- Risk assessments
- TQ's, ER's and communication with Employer
- Rigging studies
- QCP's and ITP's

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed on the Site.

Not applicable.

4.1.2 BBBEE and preferencing scheme

Not applicable

4.1.3 Supplier Development, Localisation and Industrialisation (SDL&I) Undertaking

Not applicable

4.2 Subcontracting

4.2.1 Preferred subcontractors

Not applicable

4.2.2 Subcontract documentation, and assessment of subcontract tenders

Not applicable

4.2.3 Limitations on subcontracting

Not applicable

4.2.4 Attendance on subcontractors

Not applicable

4.3 Plant and Materials

4.3.1 Quality

The Contractor shall control his activities and processes in accordance with Eskom's Quality Requirements for Procurement of Assets, Goods & Services, QM-58 and ISO-9001.

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

No free issue

4.3.3 *Contractor's* procurement of Plant and Materials

Not applicable

4.3.4 Spares and consumables

Not Applicable

4.4 Tests and inspections before delivery

The Contractor needs to conduct inspection and acceptance of specific equipment/s before delivery.

4.5 Marking Plant and Materials outside the Working Areas

Not Applicable

4.6 Contractor's Equipment (including temporary works).

Not Applicable

4.7 Cataloguing requirements by the Contractor

Not applicable

5 Construction

5.1 Temporary works, Site services & construction constraints

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

The Project Manager shall issue site entry, security control, permits and site regulations to the contractor.

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

In addition to the above there may be other restrictions once on Site, plus rules relating to roads, walkways and provision of barricades.

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

Restrictions and hours of work may apply on some Sites. It is very important that the Contractor keeps records of his people on Site, including those of his Subcontractors which the Project Manager or Supervisor have access to at any time. These records may be needed when assessing compensation events.

5.1.4 Health and safety facilities on Site

Section 2.3 deals with the contractual H&S requirements in addition to those of the OHSA Act.

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

Section 2.4 deals with the contractual environmental requirements.

5.1.6 Title to materials from demolition and excavation

The Contractor has no title to materials from excavation and demolition unless special arrangements are made regarding such title in the Works Information.

5.1.7 Cooperating with and obtaining acceptance of Others

The Project Manager will be responsible with Cooperating with and obtaining acceptance of Others.

5.1.8 Publicity and progress photographs

Not Applicable

5.1.9 *Contractor's Equipment*

The contractor shall keep all records of Equipment on Site including whether it is hired or owned.

5.1.10 Equipment provided by the *Employer*.

No equipment to be provided by the Employer.

5.1.11 Site services and facilities

The Employer will provide water and electricity to the Contractor.

5.1.12 Facilities provided by the *Contractor*.

The Employer provide no facilities to the Contractor. The Contractor must provide all tools, plants, storage required to execute the works.

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

Not applicable

5.1.14 Survey control and setting out of the works.

Not applicable

5.1.15 Excavations and associated water control

Not applicable

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

The Contractor must conduct inspection to understand existing equipment/service available in the building and associated areas.

5.1.17 Control of noise, dust, water and waste

Not applicable

5.1.18 Sequences of construction or installation

Not applicable

5.1.19 Giving notice of work to be covered up.

Not applicable

5.1.20 Hook ups to existing works

Not applicable

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.

All works must be completed on the Completion date to certify completion by the Project Manager.

5.2.2 Use of the works before Completion has been certified.

Not applicable

5.2.3 Materials facilities and samples for tests and inspections

From time-to-time random sample test and inspections may be requested, to ensure good quality of the goods being supplied.

5.2.4 Commissioning

Commissioning is to be done before or after Completion depending on the Programme from the Project Manager.

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

In order to put the works into operation the Project Manager may require the Contractor to either do this for him or be in attendance whilst he does it, depending on who is the responsible person.

5.2.6 Take over procedures

Take-over is after or at the same time as Completion. The Contractor is to arrange an inspection before completion of the installation to inspect and identify any outstanding or any defects. The Project Manager may require the Contractor to provide assistance, on an as and when required basis.

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

The Project Manager arranges access for the Contractor to use a part of the works which has been taken over if needed to correct any Defects. After the works have been put into operation, the Employer may require the Contractor to undertake certain procedures before such access can be granted. 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

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.

5.2.9 Training and technology transfer

Not applicable

5.2.10 Operational maintenance after Completion

Not applicable

6 Plant and Materials standards and workmanship

Refer to specification:

SCOPE REQUIREMENTS UI: 15239180

6.1 Investigation, survey and Site clearance

Refer to specification:

SCOPE REQUIREMENTS UI: 15239180

6.2 Building works

Applicable National Standards

The Contractor is required to adhere to the latest editions of, and the normative references within, the following SANS standards, codes of practice, regulations & standards:

Number	Title
SANS 10400	National Building Regulations of South Africa

Refer to specification:

SCOPE REQUIREMENTS UI: 15239180

6.3 Civil engineering and structural works

Applicable National Standards

The Contractor is required to adhere to the latest editions of, and the normative references within, the following SANS standards, codes of practice, regulations & standards:

Number	Title
SANS 1464-22 Luminaires for emergency lighting	SANS 1464-22 Luminaires for emergency lighting
ISO 9001 Quality Management Systems	ISO 9001 Quality Management Systems
SANS 543 Fire hose reels (with semi-rigid hose)	SANS 543 Fire hose reels (with semi-rigid hose)
SANS 1128-1and 2 Installation, Maintenance and Servicing of Fire Hydrants.	SANS 1128-1and 2 Installation, Maintenance and Servicing of Fire Hydrants.
SANS 10139 Fire detection and alarm systems for buildings — System design, installation.	SANS 10139 Fire detection and alarm systems for buildings — System design, installation.
SANS 10114-2 Interior Lighting Part 2: Emergency Lighting.	SANS 10114-2 Interior Lighting Part 2: Emergency Lighting.
SANS 1186 Fire Escape and Fire Equipment Signage.	SANS 1186 Fire Escape and Fire Equipment Signage.
SANS 428 Fire Performance Classification of Thermal Insulated Building Envelope Systems	SANS 428 Fire Performance Classification of Thermal Insulated Building Envelope Systems
SANS 543 Fire hose reels (with semi-rigid hose)	SANS 543 Fire hose reels (with semi-rigid hose)

Act No. 103 of 1977 National Building Regulations and Building Standards	Act No. 103 of 1977 National Building Regulations and Building Standards
SANS 10400 The Application of the National Building Regulations of South Africa	SANS 10400 The Application of the National Building Regulations of South Africa
Act 85 of 1993 Occupational Health and Safety	Act 85 of 1993 Occupational Health and Safety
SANS 10400-T The Applications of the National Building Regulations - Fire Protection	SANS 10400-T The Applications of the National Building Regulations - Fire Protection
SANS 10400-Part W The Applications of the National Building Regulations - Fire Installation	SANS 10400-Part W The Applications of the National Building Regulations - Fire Installation
NFPA 13 Standard for the Installation of Sprinkler Systems	NFPA 13 Standard for the Installation of Sprinkler Systems

Refer to specification:

SCOPE REQUIREMENTS UI: 15239180

6.4 Electrical & mechanical engineering works

Refer to specification:

SCOPE REQUIREMENTS UI: 15239180

6.5 Process control and IT works

Refer to specification:

SCOPE REQUIREMENTS UI: 15239180

6.6 Other [as required]

7 List of drawings

7.1 Drawings issued by the *Employer*.

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title
WH-ESKM-FP-001		FIRE PROTECTION LAYOUT
WH-ESKM-FP-002		FIRE PROTECTION DETAILS
WH-ESKM-FD-001		FIRE DETECTION SYSTEM
WH-ESKM-FD-002		FIRE DETECTION SYSTEM

C3.2 *CONTRACTOR'S* WORKS INFORMATION

Not applicable

PART 4: SITE INFORMATION

Document reference	Title	No of pages
C4	This cover page	1
	Site Information	1
	Total number of pages	2

PART 4: SITE INFORMATION

1. General description

The superstore building located at 26.23° S, 28.11° E in Rosherville, Johannesburg, Gauteng. It is a single-story building with mezzanine floor offices and a parking lot. Is in good structural condition and has existing sprinkler protection installation that is served from a pump station and fire water storage tanks. Fire hydrants and fire hose reels are currently being served from municipal mains that have become unreliable to serve as the primary fire-fighting water source.

Refer to the following specifications:

SCOPE REQUIREMENT UI: 15239180

2. Existing buildings, structures, and plant & machinery on the Site

Refer to the following specification:

SCOPE REQUIREMENT UI: 15239180

3. Subsoil information

Refer to the following specification:

SCOPE REQUIREMENT UI: 15239180

4. Hidden services

Refer to the following specification:

SCOPE REQUIREMENT UI: 15239180

5. Other reports and publicly available information

Refer to the following specification:

SCOPE REQUIREMENT UI: 15239180