



NEC3 Engineering & Construction Contract

**Between Airports Company South Africa
(Registration no: 1993/004149/06)**

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

for the Taxiway Centre Line Lights at ORTIA

Contents:	No of pages
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CONTRACT No. 4830

Part C1: Agreements & Contract Data

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

ORTIA TAXIWAY CENTRE LINE LIGHTS

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.

TAXIWAY CENTRE LINE LIGHTS

Options B	The offered total of the Prices exclusive of VAT is	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:

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 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

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	_____ <i>(Insert name and address of organisation)</i>	_____ <i>(Insert name and address of organisation)</i>
Name & signature of witness	_____	_____
Date	_____	_____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

The Conditions of contract are selected from the NEC3 Engineering and Construction Contract, April 2013.

Each item of data given below is cross-referenced to the NEC3 Professional Services Contract which requires it.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	Main Option	B: Priced contract with bill of quantities
	Dispute resolution Option	W1: Dispute resolution procedure
	Secondary Options (incorporating amendments)	X7: Delay damages
		X13: Performance bond
		X16: Retention
		X18: Limitation of liability
		Z: Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Airports Company South Africa SOC Limited, O.R. Tambo International Airport
	Address	Airports Company South Africa SOC Limited O.R. Tambo International Airport Private Bag X1, Kempton Park 1627
	Telephone	+27 11 921 6911
	Fax	+27 11 390 1012
10.1	The <i>Project Manager</i> is: (Name)	Xolani Khumalo
	Address	O.R. Tambo International Airport 4th Floor ACSA Offices North Wing Building
	Tel	+27 11 921 6514
	Fax	N/A
	e-mail	xolani.khumalo2@Airports.co.za

10.1	The <i>Supervisor</i> is: (Name)	Arvind Jeewan	
	Address	O.R. Tambo International Airport 4th Floor ACSA Offices North Wing Building	
	Tel No.	+27 11 921 6514	
	Fax No.	N/A	
	e-mail	Arvind.Jeewan@Airports.co.za	
11.2(13)	The <i>works</i> are	Taxiway Centre Line Lights at ORTIA	
11.2(14)	The following matters will be included in the Risk Register	All early warning matters notified by the <i>Project Manager</i> or the <i>Contractor</i>	
11.2(15)	The <i>boundaries of the site</i> are	Airside at O.R. Tambo International	
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	Seven (7) days	
2	The <i>Contractor's</i> main responsibilities		
20.1	The <i>Contractor</i> Provides the works	in accordance with the Works Information	
26.2	The <i>Contractor</i> submits the name of each proposed Subcontractor	to the <i>Project Manager</i> for acceptance	
26.3	The <i>Contractor</i> submits the proposed conditions of contract for each subcontract	to the <i>Project Manager</i> for acceptance	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	14 months after 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 TBC	TBC
		2 [●]	[●]
30.1	The <i>access dates</i> are:	Part of the Site	Date
		1 ORTAFS	Upon completion of ORTAFS Induction
		2 Airside	Upon receipt of airside permits

31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	Two (2) weeks from starting date.
31.2	The <i>starting date</i> is	Upon signing of contract by both parties
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	Two (2) weeks
47	The Contractor submits a quality plan for acceptance within:	Four (4) weeks of the Contract Date
5	Payment	
50.1	The <i>assessment interval</i> is	Every four (4) weeks, on the 25 th 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	Four to six (4-6) weeks after the receipt of the tax invoice
51.4	The <i>interest rate</i> is	The prime lending rate of the Nedbank Bank as determined from time to time
6	Compensation events	
60.1(13)	The place where weather is to be recorded is: The <i>weather measurements</i> to be recorded for each calendar month are, The <i>weather measurements</i> are supplied by The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at: and which are available from:	[•] 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 South African Weather Bureau and included in Annexure A to this Contract Data provided by the Employer
60.1(13)	Assumed values for the ten year return <i>weather data</i> for each <i>weather</i>	As stated in Annexure A to this Contract Data provided by the Employer.

measurement for each calendar month
are:

7	Title	No data required for this section of the <i>conditions of contract</i>
8	Risks and insurance	
81.1	The Contractor's Risk	Add: <i>Definition of Force Majeure -</i> <i>The following additional conditions must satisfied:</i> <i>(1) The Contractor has engaged with the persons responsible for the riot, commotion, disorder, strike or lockout; has met with the persons or leaders; and has recorded the persons or leaders details, their grievances, the organisations involved, all threats made; and has requested the persons or leaders to cease all unlawful conduct; and</i> <i>(2) The Contractor has obtained proof of the riot, commotion, disorder, strike or lockout, and of any unlawful conduct; and</i> <i>(3) The Contractor has reported all threats and unlawful conduct to the South African Police Service; and</i> <i>(4) The Contractor has brought an urgent application to the court on an ex parte basis that correctly identify the respondents and define the unlawful conduct to be interdicted; and</i> <i>(5) The Contractor has ensured that the court order is enforced.</i>
84.1	The <i>Employer</i> provides these insurances from the Insurance Table	See Annexure D to this Contract Data provided by the Employer.
84.1	The <i>Contractor</i> provides the insurance stated in	The Insurance Clauses which is attached at the end of the Contract Data. The insurances are in the joint names of the Parties and provide cover for events which are at the <i>Contractor</i> risk from the starting date until the Defects Certificate or a termination certificate has been issued.
84.2	The minimum limit of indemnity for insurance in respect of 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 for any one event is	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R [●].
9	Termination	Applicable as per Section 9 of the NEC3 ECC (April 2013)

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 (Name)	The person selected from the panel of adjudicators listed in Annexure C of this Contract Data, by the party intending to refer a dispute to him.
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Chairman of the Johannesburg Society of Advocates, or his successor or his nominee.
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	In the city where the Site is located, within South Africa.
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
	- if the arbitration procedure does not state who selects an arbitrator, is	
12	Data for secondary Option clauses	
X7	Delay damages	
X7.1	Delay damages of the <i>works</i> are	Amount per week is 1% up to a maximum of 10% of the Contract value
X13	Performance bond	
X13.1	The amount of the performance bond is	10% of the contract value
X16	Retention	
X16.1	The <i>retention free amount</i> is	R0.00 (Zero Rand)
	The <i>retention percentage</i> is	5% of the Prices, 2.5% will be released at Completion of the works and the remaining 2.5% will be released after the Defects Period

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:	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue
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 total of the costs incurred and/or damages to the property
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 total of the costs incurred and/or damages to the property
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 costs incurred and/or damages to the property 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 works, Plant and Materials), • death of or injury to a person; • damage to third party property; and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	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.
Z	The <i>Additional conditions of contract</i> are	Z1 to Z24 below.

AMENDMENTS TO THE CORE CLAUSES

- Z1 Interpretation and the law**
- Z1.1 Add to core clause 12.3:** 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.
- Z1.2 Add the following as a new core clause 12.5:**
- Z1.2.1** In this contract:
- Z1.2.1.1** references to any Party to the Contract include its successors or permitted assigns;
- Z1.2.1.2** references to the Contractor include the obligations of its personnel;

- Z1.2.1.3** the references to the provisions of any law include such provisions as amended, re-enacted or consolidated from time to time in so far as such amendment, re-enactment or consolidation applies or is capable of applying to any works under this Contract;
- Z1.2.1.4** references to this Contract and any deed, Contract or instrument are deemed to include references to this Contract or such other deed, agreement or instrument as amended, novated, supplemented, varied or replaced from time to time;
- Z1.2.1.5** references to a "person" include a natural person, company or any other artificial person or other corporate entity, a charity, trust, partnership, joint venture, syndicate, or any other association of persons;
- Z1.2.1.6** references to "month" means a calendar month;
- Z1.2.1.7** headings are for convenience only and are not taken into consideration in the interpretation of the Contract;
- Z1.2.1.8** where any number of days is prescribed, those days are reckoned exclusively of the first and inclusively of the last day unless the last day falls on a day that is not a working day, in which event the last day is the next succeeding working day;
- Z1.2.1.9** any provision in Contract that is or may become illegal, invalid or unenforceable in any jurisdiction is ineffective to the extent of such prohibition or unenforceability in such jurisdiction and is treated as severed from the balance of Contract in such jurisdiction, without invalidating the remaining provisions of Contract in such jurisdiction or affecting it in any other jurisdiction;
- Z1.2.1.10** references to any amount means that amount exclusive of VAT, unless the amount expressly includes VAT;
- Z1.2.1.11** the rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given;
- Z1.2.1.12** the rule of construction that the Contract is interpreted against or to the disadvantage of the party responsible for the drafting or preparation of Contract does not apply;
- Z1.2.1.13** words and abbreviations that have well known technical or trade meanings are used in the Contract in accordance with such recognized meanings;
- Z1.2.1.14** references to a "*subsidiary*" or a "*holding company*" is references to a direct or indirect subsidiary or holding company as defined in the law of the jurisdiction of the place of incorporation of the company that has a subsidiary or holding company and "*affiliate*" is any company that is under common control with such subsidiary or holding company;
- Z1.2.1.15** time is of the essence in the performance of the parties' respective obligations.
- Z2 The Project Manager and Supervisor: add the following at the end of core clause 14.2:**
- Z2.1** The Project Manager and the Supervisor may take an action which they have delegated.
- Z3 Early Warning: add the following at the end of core clause 16.2:**
- Z3.1** The Contractor ensures that a subcontractor attends risk reduction meeting if its attendance would assist in deciding the actions to be taken.
- Z4 Providing the Works: Delete core clause 20.1 and replace with the following:**
- Z4.1** The *Contractor* provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose as stated in the Works Information, and if no such purposes is stated, the ordinary purpose of the Works.

Z5 Subcontracting:

Z5.1 The following clause is added as a new core clause 26.4: "Within 5 days of request by the *Project Manager*, the Contractor provides proof to the *Project Manager* that the Contractor's payment obligations towards its Subcontractors have been discharged. Failure by the Contractor to provide such proof to the satisfaction of the *Project Manager* entitles the *Employer* to instruct the *Project Manager* to certify payment directly to any such Subcontractor and the Contractor shall have no recourse to recover such amounts from the *Employer*. Such direct payment do not create privity of contract between the Employer and such Subcontractor. The *Employer* may recover such direct payment from the Contractor."

Z6 Other responsibilities: add the following at the end of core clause 27:

Z6.1 The Contractor has satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date.

Z6.2 The Contractor is responsible for the correct setting out of the Works in accordance with the original points, lines and levels stated in the Works Information or notified by the *Project Manager*, Supervisor or the Employer. Any errors in the positioning of the Works are rectified by the Contractor at the Contractor's own costs.

Z7 Acceleration: add the following new provisions at the end of core clause 36:

Z7.1 The Project Manager's reply is either:

Z7.1.1 A notification that the quotation is accepted, in which case, the *Project Manager* changes the Prices, Completion Date and Key Dates and accepts the revised programme; or

Z7.1.2 A notification that the quotation is not accepted and that the Prices, Completion Date and Key Dates are not changed.

Z8 Extending the defects date: add the following as a new core clause 46:

Z8.1 If the Employer cannot use the works due to a Defect, which arises after Completion and before the defects date, the defects date is delayed by a period equal to that during which the Employer, due to a Defect, is unable to use the works.

Z8.2 If part of the works is replaced due to a Defect arising after Completion and before the defects date, the defects date for the part of the works which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced.

Z8.3 The *Project Manager* notifies the Contractor of the change to a defect date when the delay occurs. The period between Completion and an extended defects date does not exceed twice the period between Completion and the defects date stated in the Contract Data.

Z9 Quality Management System: add the following as a new core clause 47:

Z9.1 The Contractor implements and maintains a quality management system with the requirements stated in the Works Information.

Z9.2 Within the period stated in the Contract Data, the Contractor provides the *Project Manager* with a quality plan for acceptance. A reason for not accepting the quality plan is that it does not allow for the Contractor to Provide the Works.

Z9.3 If any changes are made to the quality plan, the Contractor provides the *Project Manager* with the changes quality plan for acceptance.

Z9.4 The *Project Manager* may instruct the Contractor to correct a failure to comply with the quality plan. This instruction is not a compensation event.

Z10 Assessing the amount due:

Z10.1 Delete the second bullet point of core clause 50.1 and replace with the following: “within thirteen weeks of termination of this Contract”

Z11 Final assessment: add the following as a new core clause 53:

Z11.1 The *Project Manager* makes a final assessment and certifies final payment in accordance with the Contract. The final payment is made within four weeks of the assessment.

Z11.2 An assessment of the final amount due is conclusive evidence of the final amount due under or in connection with the Contract, unless a Party raises a dispute in relation to the assessment of the final amount due.

Z11.3 The assessment of the final amount due is changed to include any agreement the Parties reached and/or a decision of the Adjudicator which has not been referred to the tribunal within four weeks of that decision. The changed assessment becomes conclusive evidence of the final amount due under or in connection with the Contract.

Z12 Notifying compensation events:

Z12.1 Delete the last sentence in core clause 61.3 and replace with the following: “If the *Contractor* does not notify a compensation event within four weeks of becoming aware of the event, he is not entitled to a change in the Prices, the Completion date or a Key Date and the *Employer* is absolved from all liability in relation to such event.”

Z13 Assessing compensation events:

Z13.1 The following is added at the end of core clause 63.4: “the *Contractor* shall only be entitled to changes to the Prices, the Completion Date and/or the Key Date if the compensation event affects the critical path.”

Z14 Termination

Z14.1 Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”: “business rescue proceedings are initiated or steps are taken to initiate business rescue proceedings”.

AMENDMENTS TO THE SECONDARY OPTION CLAUSES

Z15 Changes in Law: Add the following clause to secondary option X2 as X2.2:

Z15.1 A change in law is defined as:

Z15.1.1 the adoption, enactment, promulgation, coming into effect, repeal, amendment, reinterpretation, change in application or other modification after the Contract Date of any law, excluding (i) the enactment of any bill inside the country, but only if such bill is enacted without any material changes being made to the contents of such bill from the form published in the Gazette (as defined in the Interpretation Act, 1957) as at the Contract Date, and (ii) any such modification in law relating to any taxes, charges, imposts, duties, levies or deductions that are assessed in relation to a person's income

Z15.1.2 any permit being terminated, withdrawn, amended, modified or replaced, other than (i) in accordance with the terms upon which it was originally granted, (ii) as a result of the failure by the *Contractor* to comply with any condition set out therein, or (iii) as a result of any act or omission of the *Contractor*, any Subcontractor or any affiliate to the *Contractor*.

Z16. Delay damages: add the following to secondary Option X7 (if applicable in this contract)

Z16.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7, the *Employer* may, at its sole discretion, terminate the *Contractor's* obligation to Provide the Works.

- Z16.2** If the *Employer* terminates in terms of this clause, the procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table
- Z17 Performance Bond**
- Z17.1** **Amend the first sentence of clause X13.1 to read as follows:** The *Contractor* gives the *Employer* an unconditional, on-demand performance bond, provided by a bank or insurer which the *Project Manager* and the *Employer* have accepted, for the amount stated in the Contract Data and in the form set out in Annexure B of this Contract Data.
- Z17.2** **Add the following new clause as Option X13.2:** The *Contractor ensures* that the performance bond is valid and enforceable until the end of the *contract period*. If the terms of the performance bond specify its expiry date and the end of the *contract period* does not coincide with such expiry date, four weeks prior to the said expiry date, the *Contractor* extends the validity of the performance bond until the end of the *contract period*. If the *Contractor* fails to so extend the validity of the performance bond, the *Employer* may claim the full amount of the performance bond and retain the proceeds as cash security
- Z18 Limitation of liability: Insert the following new clause as Option X18.6:**
- Z18.1** The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00.
- Z18.2** Notwithstanding any other clause in this contract, any proceeds received from the security bonds and guarantees provided by the *Contractor* in terms of this Contract and any insurances or any proceeds which would have been received from any insurances but for the conduct of the *Contractor* shall be excluded from the calculation of the limitations of liability listed in the contract.

ADDITIONAL Z CLAUSES

- Z19 Cession, delegation and assignment**
- Z19.1** The *Contractor* shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*, which consent shall not be unreasonably withheld. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the *Contractor*.
- Z19.2** The *Employer* may, on written notice to the *Contractor*, cede and delegate its rights and obligations under this contract to any person or entity.
- Z20 Joint and several liability**
- Z20.1** If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the *Employer* for the performance of the Contract.
- Z20.2** The *Contractor* shall, within 1 week of the Contract Date, notify the *Project Manager* and the *Employer* of the key person who has the authority to bind the *Contractor* on their behalf.
- Z20.3** The *Contractor* does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the *Employer*.
- Z21 Ethics**
- Z21.1** The *Contractor* undertakes:
- Z21.1.1** not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;
- Z21.1.2** to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the *Employer* is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.

- Z21.2** The *Contractor's* breach of this clause constitutes grounds for terminating the *Contractor's* obligation to Provide the Works or taking any other action as appropriate against the *Contractor* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.
- Z21.3** If the *Contractor* is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the *Employer*, the *Employer* shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. The amount due on termination is A1.
- Z22 Confidentiality**
- Z22.1** All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the *Contractor* and shall not be used or divulged or published to any person not being a party to this contract, without the prior written consent of the *Project Manager* or the *Employer*, which consent shall not be unreasonably withheld.
- Z22.2** If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.
- Z22.3** This undertaking shall not apply to –
- Z22.3.1** Information disclosed to the employees of the *Contractor* for the purposes of the implementation of this agreement. The *Contractor* undertakes to procure that its employees are aware of the confidential nature of the information so disclosed and that they comply with the provisions of this clause;
- Z22.3.2** Information which the *Contractor* is required by law to disclose, provided that the *Contractor* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect such information. The *Contractor* may disclose such information only to the extent required by law and shall use reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed;
- Z22.3.3** 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);
- Z22.4** 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*.
- Z22.5** The *Contractor* ensures that all his Subcontractors abide by the undertakings in this clause.
- Z23 Liens and Encumbrances**
- Z23.1** The *Contractor* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Contractor*, vis-a-vis the *Employer*, waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the *Employer*, waive all liens they may have or become entitled to over such Equipment from time to time
- Z24 Intellectual Property**
- Z24.1** Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.
- Z24.2** IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- Z24.3** The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works.

- Z24.4** The written approval of the *Contractor* is to be obtained before the *Contractor's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor's* IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP.
- Z24.5** The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:
- Z24.5.1** the *Contractor's* design, manufacture, construction or execution of the Works;
- Z24.5.2** the use of the *Contractor's* Equipment, or
- Z24.5.3** the proper use of the Works.
- Z24.6** The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for [weather station]

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

	<i>Weather measurement</i>				
Month	Cumulative rainfall (mm)	Number of days with rain more than 10mm	Number of days with min air temp < 0 deg.C	Number of days with snow lying at 08:00 CAT	[Other measurements if applicable]
January	204	7	0	No Data	
February	177	6	0	No Data	
March	165	5	0	No Data	
April	101	3	0	No Data	
May	52	2	2	No Data	
June	27	1	7	No Data	
July	15	1	7	No Data	
August	19	0	4	No Data	
September	56	2	1	No Data	
October	138	4	0	No Data	
November	180	7	0	No Data	
December	175	7	0	No Data	

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

Annexure B: Pro forma Security Bonds and Guarantee

PERFORMANCE BOND

[TO BE REPLICATED ON BANK'S LETTERHEAD]

Brief description of contract.....

Name and address of Beneficiary.....

..... (whom the contract defines as the Contractor).

We, the undersigned and..... in our capacities as Guarantor's..... of (**Registration Number:**) (hereinafter called "the Bank") have been informed that hereinafter called the 'Principal') is your Contractor under such contract, which requires him to obtain an irrevocable, unconditional performance security.

At the request of the Principal, we(name of bank) hereby irrevocably undertake to pay you, the Employer, any sum or sums not exceeding in total the amount of(the "Guaranteed Amount") upon receipt by us of your first written demand stating that such an amount (or lesser amount) as may be claimed is due and payable to the Employer.

This guarantee constitute an irrevocable, unconditional, non-negotiable and non-transferable undertaking to pay in accordance with the above, subject to the proviso that this Letter will not be interpreted as extending the Bank's liability to anything more than the Guaranteed Amount.

Notwithstanding anything to the contrary herein contained, the Bank's obligation shall be construed as principal and not as accessory to the contract and shall not be delayed or discharged by the fact that a dispute exists between the Employer and the Contractor.

We undertake to pay you such Guaranteed Amount upon receipt by us, within such period of 14 days, of your first written demand stating that such an amount (or lesser amount) as may be claimed is due and payable to the Employer.

The guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa

Signed at _____ on _____ 20....

For:

Registration Number:

Name & Position

As witnesses:

1. _____

2. _____

Annexure C: ACSA Panel of Adjudicators

One of the following adjudicators shall be selected by the referring party as and when a dispute arises. This panel is valid for a period of three years, commencing on 1 May 2020.

Potential Adjudicator	Email Address	Chamber
Adv. Mkhululi Duncan Stubbs	duncan.stubbs@gmail.com	Thulamela Chambers
Adv. Arzhar Bham SC	bhamae@law.co.za	Victoria Mxenge
Adv. Mohhamed Chohan SC	chohann@counsel.co.za	Group One
Adv. Benny Makola	benny.makola@gmail.com	Group 621
Adv. Vincent Maleka SC	ivmaleka@mweb.co.za	Thulamela Chambers
Adv. Chris Loxton SC	loxton@counsel.co.za	Group One

Annexure D: ACSA Insurance Clauses

INSURANCE CLAUSES FOR AIRSIDE CONSTRUCTION CONTRACTS WHERE THE AWARDED CONTRACT VALUE DOES NOT EXCEED R150 MILLION, AND THE CONSTRUCTION PERIOD DOES NOT EXCEED 36 MONTHS, AND THE DEFECTS LIABILITY PERIOD DOES NOT EXCEED 24 MONTHS

Each Party shall be responsible for effecting and maintaining the relevant insurances as specified below and to the extent relevant to the Contract.

1. Insurance Effected By The Employer (Principle Controlled Insurance (“PCI”))

- 1.1 Notwithstanding anything elsewhere contained in this Contract and without limiting the obligations, liabilities or responsibilities of the Contractor in anyway whatsoever (including but not limited to any requirement for the provision by the Contractor of any other insurances) the **Employer** shall effect and maintain for the duration of the construction and maintenance periods of the Contract - as appropriate in the joint names of the Employer, the Contractor and where relevant Sub-Contractors the following insurances which are subject to the terms, limits, exceptions and conditions of the Policy:

a) Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability

Section 1 Of The Policy – Contract Works

Contract Works Insurance for the full value of the Works to provide cover against accidental physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works all being the subject matter of this Contract including to the extent provided for in the policy whilst in transit or temporarily stored at any premises en route to or from the Site (other than where this is a continuation of Marine Transit) within the territorial limits of the policy.

This insurance may specifically exclude any cost necessary to replace or rectify any of the property insured, which is in a defective condition due to defect in design, plan specification, material or workmanship.

This insurance contains the following limitations and warranties ;

Open Trench Limitation

In respect of loss or damage to open trenches and pipes, conduits or cables laid therein, caused directly or indirectly by rain, inundation or flood, Insurers liability shall be limited in respect of the aggregate length of open trenches at any one time to 2,500 meters.

Exposed Layer Works (applicable to works involving paving, roadways, bulk earthworks and runways and taxiways)

In respect of loss or damage to Exposed Layer Works relating to paving, roadways and runways (including taxiways) caused directly or indirectly by rain, inundation or flood, Insurers liability shall be limited in respect of the aggregate length of Exposed Layer Works at any one time to 2,500 meters.

Section II of the Policy – Contractors Public Liability

Public Liability Insurance which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the

Works the subject matter of this Contract) arising from the execution of the Contract with a limit of indemnity of **R100,000,000** in respect of any one occurrence or series of occurrences consequent on or attributable to one source or original cause.

Section III of the Policy – Removal Of Lateral Support Liability

Removal Of Lateral Support Liability which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the Works the subject matter of this Contract) arising out of or in connection with shock or vibration or the removal or weakening of or interference with support to property in the vicinity of the Contract Site and arising out of or in connection with the Insured Contract (but not in respect of tunneling works) and occurring during the Period of Insurance.

The Limit of Indemnity being limited to R50,000,000 attributable to one source or original cause

- b. **Contract Works SASRIA** – Providing physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works as covered by the underlying Contract Works policy as noted in (a) above due to perils as covered in terms of the SASRIA Contract Works wording as issued by SASRIA SOC.

The Contract Works SASRIA cover excludes consequential or indirect loss or damage of any kind or description whatsoever.

The SASRIA Contract Works policy is limited to **R500,000,000 (Incl VAT)** in the aggregate during the policy period of insurance.

The Contract Works SASRIA policy wording can be obtained from the SASRIA website <http://www.sasria.co.za/> which notes the covers and policy exclusions.

- c) **Aviation Liability Insurance** which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the Works the subject matter of this Contract) arising from the execution of the Contract with a limit of indemnity of **R2,000,000,000** in respect of any one occurrence or series of occurrences consequent on or to one source or original cause.

This insurance is in respect of liability relating to aircrafts.

- d) **Design & Construct Professional Indemnity Insurance** which provides indemnity against legal liability to pay compensation as a result of any actual or alleged negligent act, error or omission in the performance of the Professional Duties of the insured and arising from the execution of this project. The limit of indemnity under this insurance shall be ***R25,000,000 in the aggregate during the annual policy period of insurance that ACSA effect such cover during the policy period from 1 April to 31 March during each policy period of insurance.**

****The limits of indemnity applies to all ACSA contracts as a whole and does not apply specifically to this contract. The aggregate limit could be exhausted by claims under other ACSA contracts and there is no guarantee that this insurance cover will provide sufficient cover to this specific contract should the aggregate limit be exhausted.***

The Policy only covers the rectification of the works and excludes all consequential losses.

Professional Duties do not include:

- a) Labour and construction work which would normally be the responsibility of the building or engineering contractor.
 - b) Supervision of the construction works usually undertaken by a building or engineering contractor.
- 1.2 The **Contractor** shall familiarise itself fully with the details of such insurance effected by the Employer. The Contractor shall comply to all the terms and conditions of the Employer arranged policies and the Contractor shall be deemed to be fully aware of all the conditions, limits, limitations, exclusions/exceptions and deductibles that are contained in the Employer arranged policies. Copies of the Employer arranged policies are obtainable on request from the Employer and if the Contractor is of the opinion that additional insurance is required, such shall be for the Contractors account.
- 1.3 The Employer shall pay the premium in connection with the insurances effected by the Employer. The Employer is entitled to all return premiums, dividends, discounts, or adjustments in connection with the insurances effected by the Employer.
- 1.4 The Contractor shall not include any premium charges for this insurance except to the extent, which he may deem necessary in his own interests to effect supplementary insurance to the insurance effected by the Employer. The Employer reserves the right to call for full information regarding insurance costs included by the Contractor.
- In the event that the Contractor purchases any insurances in addition to those indicated above, the premium and taxes, duties, etc. shall be borne entirely by the contractor.
- 1.5 Any further clarification of the scope of cover provided by the Policies arranged by the Employer should be obtained from the Employer.
- 1.6 The Contractor and/or any other party who obtains indemnity under the policies effected under 1.1 shall become liable for the deductibles (first amount payable) which are applicable in respect of each and every occurrence or series of occurrences attributable to one source or cause giving rise to loss or damage or indemnifiable liability. The deductibles applicable to the policies effected under 1.1 are as follows:

a) **Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability**

Unless stated otherwise in the Policy Extensions the Deductibles shall be as follows which will apply in respect of each and every occurrence or series of occurrences arising out of or in connection with any one event giving rise to loss or damage:

Section 1 Of The Policy – Contract Works

In respect of all loss or damage **R150,000** but increased to **R250,000** in respect of loss or damage arising out of or in connection with testing and commissioning.

Section 2 Of The Policy – Contractors Public Liability

R75,000 each and every claim in respect of Property Damage.

Section 3 Of The Policy – Removal Of Lateral Support Liability

R75,000 each and every claim.

b) **Contract Works SASRIA**

In respect of theft as a result of the SASRIA perils insured - **R25,000** each and every occurrence .

c) Aviation Liability Insurance ;

In respect of each and every loss or damage or injury – **R300,000**.

d) Design & Construct Professional Indemnity Insurance

a) In respect of contracts under R50 million at award – **R5,000,000**.

b) **In respect of contracts over R50 million at award – R10,000,000**

1.7 In the event of any occurrence which is likely to give rise to a claim under the insurance arranged by the Employer, the Contractor shall:

- a) In addition to any statutory requirement or other requirements contained in the Contract immediately notify the Employer and the Employer's Insurance Brokers by telephone, mobile phone or email giving the circumstances, nature and an estimate of the loss or damage or liability. The Contractor must also complete the Claim Advice Form (Appendix "A").

The following persons/insurers must be advised immediately on the occurrence of a claim on site or even a possibility of a claim arising due to an incident occurring on site:

Airports Company South Africa :
Nokulunga Masiza
Tel: +27 (0)11 723 1400
M: +27 (0)79 512 0532
Nokulunga.Masiza@airports.co.za

Buhle Mnguni
D: +27 (0)11 723 1400
M: +27 (0)74 535 9075
Buhle.Mnguni@airports.co.za

- b) Preserve damage and make it available for inspection by a representative of the Insurers.
- c) Wherever possible, photographs of damage should be taken.
- d) Inform the police authorities promptly in the event of loss or damage by theft, burglary or any malicious persons(s) for the purpose of recovering any property so lost, discovering the guilty person or persons, and having him, her or them duly prosecuted.
- e) Advise the Insurers of any other insurance(s) which may cover the same loss, damage or injury, or any part thereof.
- f) Give to the Insurers every assistance to enable the Insurers to settle or resist any claim against the Insured, or institute any proceedings;
- g) On completion the Claims Advice Form, the form must be sent to the Employers Insurance Brokers for further action (the original may be emailed to the Employers Insurance Broker). (Please do not remove the Claims Advice Form out of this document. Rather photocopy the form and send the copy to the Employers Insurance Brokers).
- h) The Employer and the employers Insurance brokers / Insurers or their appointed loss adjusters shall have the right to make all and any enquiry's on the Site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall co-operate in carrying out such enquiry's.
- i) The Contractor, Project Managers and Contractors must allow free access to Insurers'

assessors for the purpose of investigating and assessing the loss or damage.

- j) **The Contractor must not proceed with the making good any off the loss without the prior authorisation of the Insurers.**
- k) The Contractor must keep separate records of the costs involved in making good any loss or damage and these records should be available at all times for inspection by Insurers. Such records should include inter alia the entire cost of labour, materials, transport and equipment.
- l) Where required by the Employer, negotiate the settlement of claims with the Insurer or their appointed loss adjusters through the Employer's Insurance Brokers and shall obtain the Employer's approval of such settlement.
- m) Once the amount of a claim is agreed by the Insurers and the Contractor, an "Agreement of Loss" form must be signed by the Contractor and if required this shall be counter signed by the Employer or the Project Managers.
- n) The proceeds of such claim will, if required by the Employer, be paid net of any Deductible applicable under the policy by the Insurers to the Employer who on receipt thereof will arrange for payment to be made in terms of the Conditions of Contract. In the event that it is agreed by the Employer that such claims payment be made directly to the Contractor, the Contractor shall arrange for the Employer to endorse the "Agreement of Loss" to this effect.

2. Insurance Effected by the Contractor.

In addition to Clause 1.1 in respect of the insurances effected by the Employer the following Insurances to be effected by the Contractor :

2.1 Without limiting the Contractor's obligations, responsibilities and liabilities, the Contractor and Sub-contractor shall maintain at the Contractor's and Subcontractor's expense and where applicable provide as a minimum the following insurances:

- a) **Insurance of Construction Plant and Equipment** (including tools offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.

The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

- b) **Contractor's Common Law Liability/ Worker's Compensation Insurance**

The Contractor shall take out and maintain employer's liability insurance with a limit of indemnity of not less than **R20,000,000** and/or workmen's compensation insurance covering personal injury to or death of the employees of the Contractor engaged in connection with the Works to the minimum value required by applicable law.

The Contractor shall procure that its Subcontractors take out and maintain similar insurance in respect of its Subcontractor's personnel performing the Works.

In the event that a claim is made against the Employer in connection with such insurance, the Contractor shall indemnify and hold harmless the Employer against any such claim. The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

- c) **Motor Vehicle Liability Insurance** comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity with a limit of indemnity of not less than **R5 000 000** for all owned, non-owned, leased and hired vehicles.

d) **Insurance For Buy-Down Cover Of Employer's Deductibles**

Should the Contractor believe that the Employer effected Contract Works, Public Liability and Design & Construct Professional Indemnity deductibles as noted in Clause 1.6 (a),(c) and (d) be considered to be unacceptable to the Contractor, then the Contractor must obtain Buy Down cover for these deductibles to a deductible considered by the Contractor as being acceptable in respect of the works being undertaken.

- e) Where the Contract involves manufacturing and/or fabrication of the Works or parts thereof at premises other than at the Contract Site the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the Works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such Works during manufacture or fabrication then such interest shall be noted by endorsement to the relevant Policies of Insurance.

Such insurance shall name Employer as an additional insured, and shall be primary to any insurance maintained by the Employer.

- f) **Public Liability** insurances in excess of the Employers Public Liability insurances as stated under clause 1.1(a).
- g) **Aviation Liability** insurances in excess of the Employers Aviation Liability insurances as stated under clause 1.1(c).
- g) **Contractor's Professional Indemnity Insurance** in excess of the Employers Design & Construct Professional Indemnity insurances as stated under clause 1.1(d) and if applicable to cover the deductible that applies to the Employer effected insurance.

i) **Marine Cargo Insurance (If Applicable)**

Cover : Imports of cargo, equipment, goods, plant, machinery and materials ("Insured Property") to the site where the Permanent Works will be constructed.

Sum Insured: Not less than the value of the largest single cargo shipment, conveyance or the value in storage, whichever is the greater (CIF plus 10%).

Marine / Air Cargo Insurance covering the Insured Property against all risks of physical loss or damage while in transit by land, sea or air from country of origin anywhere in the world to the site where the Permanent Works will be constructed including loading, or vice versa, from the commencement of the time the insured items are loaded prior leaving the warehouse or factory for shipment to the said site.

The insured parties are the Employer, the Contractor and its Subcontractors, and all their personnel involved in the execution of any Works on the construction site.

j) **Miscellaneous Insurance**

Other insurance as is customary, desirable or necessary to comply with applicable Laws in the Country.

- 2.2 The insurances to be provided by the Contractor and his Sub-contractor shall be effected with Insurers and on terms approved by the Employer (which approval shall not be unreasonably withheld) and shall be maintained in force for the duration required (including any period of maintenance/defects liability period). The Contractor shall within twenty eight (28) days of commencement of the contract produce to the Employer the relevant Policy or Policies of Insurance.

- 2.3 In the event that the Contractor or his Sub-contractor receives any notice of cancellation or restrictive modification to the insurance provided to them they shall immediately notify the Employer in writing of such cancellation or restriction and shall advise what action the Contractor or his Sub-contractor will take to remedy such action.

If the Contractor fails to effect and keep in force the insurances referred to then the Employer may effect and keep in force any such insurances and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount paid by the Employer from any monies due or which may become due to the Contractor or recover same as a debt from the Contractor.

2.4 **Sub-Contractors.**

The Contractor shall:

- a) ensure that all potential and appointed Sub-contractors are aware of the whole contents of these Insurance Clauses, and

enforce the compliance by subcontract agreement between the Contractor and Sub-Contractor and where applicable that the Subcontractor effect similar insurance relating to the insurances required to be effected by the Contractor under Clause 2 (Contractor effected insurances).

Annexure E: Occupational Health and Safety Agreement

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH & SAFETY ACT (ACT 85 Of 1993) & CONSTRUCTION REGULATION 5.1(k)

OBJECTIVES

To assist Airport Company South Africa (ACSA) in order to comply with the requirements of:

1. The Occupational Health & Safety (Act 85 of 1993) and its regulations and
2. The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993) also known as the (COID Act).

To this end an Agreement must be concluded before any Contractor/ subcontracted work may commence

The parties to this Agreement are:

Name of Organisation: AIRPORTS COMPANY SOUTH AFRICA O.R. TAMBO INTERNATIONAL AIRPORT
Physical Address: Airport Company South Africa O.R. Tambo International Airport Private Bag X1, Kempton Park 1627

Hereinafter referred to as “Client”

Name of organisation:
Physical Address:

Hereinafter referred to as “the Mandatary/ Principal Contractor”

MANDATORY’S MAIN SCOPE OF WORK

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

1. The Occupational Health & Safety Act comprises of SECTION 1-50 and all unrepealed REGULATIONS promulgated in terms of the former Machinery and Occupational Safety Act No.6 of 1983 as amended as well as other REGULATIONS which may be promulgated in terms of the Act and other relevant Acts pertaining to the job in hand.
2. “Mandatary” is defined as including as agent, a principal contractor or a contractor for work, but WITHOUT DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant
3. Section 37 of the Occupational Health & Safety Act potentially punishes Employers (PRINCIPAL CONTRACTOR) for unlawful acts or omissions of Mandataries (CONTRACTORS) save where a Written Agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said Act BY THE MANDATARY.

4. All documents attached or refer to in the above Agreement form an integral part of the Agreement.
5. To perform in terms of this agreement Mandatories must be familiar and conversant with the relevant provisions of the Occupational Health & Safety Act 85 of 1993 (OHS Act) and applicable Regulations.
6. Mandatories who utilise the services of their own Mandatories (contractors) must conclude a similar Written Agreement with them.
7. Be advised that this Agreement places the onus on the Mandatary to contact the CLIENT in the event of inability to perform as per this Agreement.
8. This Agreement shall be binding for all work the Mandatary undertakes for the client.
9. All documentation according to the Safety checklist including a copy of the written Construction Manager appointment in terms of construction regulation 8, must be submitted 7 days before work commences.

THE UNDERTAKING

The Mandatary undertakes to comply with:

INSURANCE

1. The Mandatary warrants that all their employees and/or their contractor's employees if any are covered in terms of the COID Act, which shall remain in force whilst any such employees are present on the Client's premises. A letter is required prior commencing any work on site confirming that the Principal contractor or contractor is in good standing with the Compensation Fund or Licensed Insurer.
2. The Mandatary warrants that they are in possession of the following insurance cover, which cover shall remain in force whilst they and /or their employees are present on the Client's premises, or which shall remain in force for that duration of their contractual relationship with the Client, whichever period is the longest.
 - a. Public Liability Insurance Cover as required by the Subcontract Agreement.
 - b. Any other Insurance cover that will adequately makes provision for any possible losses and/or claims arising from their and /or their Subcontractors and/or their respective employee's acts and/or omissions on the Client's premises.

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993

The Mandatary undertakes to ensure that they and/or their subcontractors if any and/or their respective employees will at all times comply with the following conditions:

1. All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
2. The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHSAct 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
3. The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHSAct 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.
4. The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will include identification of hazards and risk, analysis and evaluation

of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.

5. The Mandatary shall appoint competent persons who shall be trained on any Occupational Health & Safety aspect pertaining to them or to the work that is to be performed.
6. The Mandatary shall ensure that discipline regarding Occupational Health & Safety shall be strictly enforced.
7. Any personal protective equipment required shall be issued by the Mandatary to his/her employees and shall be worn at all times.
8. Written safe working practices/procedures and precautionary measures shall be made available and enforced and all employees shall be made conversant with the contents of these practises.
9. No unsafe equipment/machinery and/or articles shall be used by the Mandatary or contractor on the Client's premises.
10. All incidents/accidents referred to in OHSAct shall be reported by the Mandatary to the Provincial Director: Department of Labour as well as to the Client.
11. No user shall be made by the Mandatary and/or their employees and or their subcontractors of any of the Client's machinery/article/substance/plant/personal protective equipment without prior written approval.
12. The Mandatary shall ensure that work for which the issuing of permit is required shall not be performed prior to the obtaining of a duly completed approved permit.
13. The Mandatary shall ensure that no alcohol or any other intoxicating substance shall be allowed on the Client's premises. Anyone suspected to be under the influence of alcohol or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall be escorted off the said premises immediately.
14. Full participation by the Mandatary shall be given to the employees of the Client if and when they inquire into Occupational Health & Safety.

FURTHER UNDERTAKING

1. Only a duly authorised representative appointed in terms of Section 16.2 of the OHS Act is eligible to sign this agreement on behalf of the Mandatary. The signing power of this representative must be designated in writing by the Chief Executive Officer of the Mandatary. A copy of this letter must be made available to the Client.
2. The Mandatary confirms that he has been informed that he must report to the Client's management, in writing anything he/she deems to be unhealthy and /or unsafe. He has versed his employees in this regard.
3. The Mandatary warrants that he/she shall not endanger the health & safety of the Client's employees and other persons in any way whilst performing work on the Client's premises.
4. The Mandatary understands that no work may commence on the Client's premises until this procedure is duly completed, signed and received by the Client.
5. Non-compliance with any of the above clauses may lead to an immediate cancellation of the contract.

ACCEPTANCE BY MANDATORY

In terms of section 37(2) of the Occupational Health & Safety Act 85 of 1993 and section 5.1(k) of the Construction Regulations 2014,

Ia duly authorised 16.2 Appointee acting for and on behalf of

.....(company name) undertake to ensure that the requirements and the provision of the OHSAct 85 of 1993 and its regulations are complied with.

Mandatory – WCA/ Federated Employers Mutual No.....

Expiry date

SIGNATURE ON BEHALF OF MANDATORY
(Warrant his authority to sign)

DATE

SIGNATURE ON BEHALF OF THE CLIENT
AIRPORT COMPANY SOUTH AFRICA

DATE

C1.2 Contract Data

Part two - Data provided by the Contractor

The Conditions of contract are selected from the NEC3 Engineering and Construction Contract, April 2013.

Each item of data given below is cross-referenced to the NEC3 Engineering and Construction Contract which requires it.

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	
31.1	The programme identified in the Contract Data is	

PART C1: AGREEMENT & CONTRACT DATA PAGE 33 C1.2 ECC3 CONTRACT DATA

Annexure B: Forms of Securities

Proformas for Bonds & Guarantees

For use with the NEC3 Engineering & Construction Contract (April 2013)

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Options:

Option X13: Performance Bond

Each of these secondary Options requires a bond or guarantee “in the form set out in the Works Information”. Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Works Information.

Option X16: Retention

The *Contractor* may provide a Retention Money Guarantee in the form stated here. When the *Employer* receives and accepts a Retention Money Guarantee exactly in the form stated he will instruct the *Project Manager* not to assess any amount be retained in terms of secondary Option X16.

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract. Any changes to the pro-forma document must be approved in writing by the Employer.

Pro forma Performance Bond – Demand Guarantee (for use with Option X13)

[To be reproduced exactly as shown below on the letterhead of the Bank providing the Bond / Guarantee]

For use with the NEC3 Engineering and Construction Contract (April 2013)

The Airports Company South Africa SOC Limited
Riverwoods Office Park, The Maples, 24 Johnson Road,
Bedfordview 2008.

Guarantor's reference No.

Date:

Dear Sirs,

Performance Bond – Demand Guarantee for [insert name of Contractor] required in terms of contract [insert Contractor's contract reference number or title]

1. In this Guarantee the following words and expressions shall have the following meanings:-

1.1	"Guarantor"	means [insert]
1.2	"Guarantor's Address"	means [insert]
1.3	"Contract" means	means the construction contract entered into between the Employer and the Contractor (Contract Reference No. _____ and such amendments or additions to the Contract as may be agreed in writing between the parties.
1.4	"Contractor"	means [insert]
1.5	"Employer"	means the Airports Company South Africa SOC Limited, a company registered in accordance with the laws of the South Africa
1.6	"Expiry Date"	means the earlier of - the date that the Bank receives a notice from the Employer stating that all amounts due from the Contractor as certified in terms of the contract have been received by the Employer and that the Contractor has fulfilled all his obligations under the Contract, or - the date that the Bank issues a replacement Bond for such lesser or higher amount as may be required by the Employer.
1.7	"Guaranteed Sum"	means [insert]
1.8	"Works"	means [insert]

2. The Guarantor's liability shall be limited to the Guaranteed Amount.

3. The Guarantor's period of liability shall be from and including the date of issue of this Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Amount, whichever occurs first. The Project Manager and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

4. The Guarantor hereby acknowledges that:

- a. any reference in this Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship; and
 - b. its obligation under this Guarantee is restricted to the payment of money.
5. The Guarantor hereby undertakes to pay the Employer any sum or sums not exceeding the Guarantee Amount in total, upon receipt of a written demand delivered to the Guarantor's Address, stating that the Contractor is in breach of its obligations under the Contract (without being required to prove the nature of the breach and the amount claimed. The written demand shall be signed by the Employer and be accompanied by the original Guarantee.
6. Payment by the Guarantor, in terms of this Guarantee, shall be made within seven (7) calendar days upon receipt of the Employer's written demand to the Guarantor.
7. The obligations under this Guarantee constitute direct primary, irrevocable and unconditional obligations, do not require any previous notice to or claim against the Contractor, and shall not in any way be released or discharged or otherwise absolved of liability hereunder by reason of any arrangement or change in relationship made between the Contractor and the Employer and/or between the Guarantor and Contractor; nor any alteration in the obligations undertaken by the Contractor or in the terms of the Contract; nor any indulgence, failure, delay by the Employer as to any matter; nor any dissolution or liquidation or such other analogous event of the Contractor (whether or not the Guarantor has notice thereof).
8. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
9. All payments made by Guarantor shall be due and payable in the amount specified in any payment demand made in respect hereof by the Employer and shall be made free and clear of and without any deduction for or on account of any tax or future taxes, levies, imposts, duties, charges, fees, set off, counterclaims, deductions or withholdings of any nature whatsoever and by whomever imposed. All charges of the Guarantor related to the issuance or performance of this Guarantee (including, but not limited to, the negotiation, payment, extension or transfer hereof) shall be borne by the Contractor and under no circumstances shall be charged to the Employer by the Guarantor.
10. This Guarantee shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the High Court of the Republic of South Africa.
11. This Guarantee, with the required demand notice, shall be regarded as a liquid document for the purposes of obtaining a court order.
12. The Guarantor chooses as its *domicilium citandi et executandi* for all purposes in connection with this Guarantee at the Guarantor's Address.
13. If at any time any one or more of the provisions of this Guarantee is or becomes illegal, invalid or otherwise unenforceable in any respect neither the legality, validity or enforceability of the remaining

provisions of this Guarantee, nor the legality, validity or enforceability of such provision, under the law shall in any way be affected or impaired as a result.

SIGNED at _____ on _____ Day of _____ 202__

For and on behalf of the **GUARANTOR**, duly authorised and warranting such authority

Full Name: _____

Capacity: _____

Witness: _____

[Insert Guarantor's stamp]

Pro forma Retention Money Guarantee (may be used when Option X16 applies)

[To be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee]

For use with the NEC3 Engineering and Construction Contract (April 2013)

The Airports Company South Africa SOC Limited
Riverwoods Office Park, The Maples, 24 Johnson Road,
Bedfordview 2008.

Date:

Dear Sirs

Reference No. [●] [Drafting Note: Guarantor's reference number to be inserted]

Retention Money Guarantee: [Drafting Note: Name of Contractor to be inserted]

Project [●]

1. In this Guarantee the following words and phrases shall have the meaning stated:-

- 1.1 **"Contract"** means the construction contract entered into between the Employer and the Contractor (Contract Reference No. _____ and such amendments or additions to the Contract as may be agreed in writing between the parties.
- 1.2 **"Contractor"** means [insert]
- 1.3 **"Employer"** means Airports Company South Africa SOC Limited, a company registered in accordance with the laws of the South Africa
- 1.4 **"Expiry Date"** means [insert]
- 1.5 **"Guarantee"** means this on-demand, unconditional, irrevocable advance payment guarantee, which is independent and/or separate from the underlying Contract.
- 1.6 **"Guaranteed Amount"** means the sum of [insert], being the total value of the advance payment made in terms of the Contract.
- 1.7 **"Guarantor"** means [insert]
- 1.8 **"Guarantor's Address"** mean [insert]

2. The Contractor is required to obtain a retention money guarantee under the Contract.

3. The Guarantor hereby undertakes to pay the Employer any sum or sums not exceeding the Guarantee Amount in total (the **"Demand Amount"**), upon receipt of a written demand delivered to the Guarantor's Address, stating that the Contractor has failed to carry out his obligation(s) to remedy certain defects for which he is responsible under the Contract and, the nature of such defects (without being required to

prove the nature of the breach and the amount claimed). The written demand shall be signed by the Employer and be accompanied by the original Guarantee.

4. The Guarantee Amount shall be reduced by 50% at the earlier of Completion of the whole of the Works and the date on which the Employer takes over the whole of the Works(as defined in the Contract). After receiving the Certificate of Completion from the Contractor the Guarantor shall promptly notify the Employer of the revised Guarantee Amount.
5. This Guarantee automatically comes into full force and effect on the signature date by the Guarantor and shall automatically expire 14 days after the assessment made at the Completion of the whole of the Works or the assessment after the Employer takes over the whole of the Works if this is before Completion of the whole of the Works.
6. The obligations under this Guarantee constitute direct primary, irrevocable and unconditional obligations, do not require any previous notice to or claim against the Contractor, and shall not in any way be released or discharged or otherwise absolved of liability hereunder by reason of any arrangement or change in relationship made between the Contractor and the Employer and/or between the Guarantor and Contractor; nor any alteration in the obligations undertaken by the Contractor or in the terms of the Contract; nor any indulgence, failure, delay by the Employer as to any matter; nor any dissolution or liquidation or such other analogous event of the Contractor (whether or not the Guarantor has notice thereof).
7. The Employer shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.
8. All payments made by Guarantor shall be due and payable in the amount specified in any payment demand made in respect hereof by the Employer and shall be made free and clear of and without any deduction for or on account of any tax or future taxes, levies, imposts, duties, charges, fees, set off, counterclaims, deductions or withholdings of any nature whatsoever and by whomever imposed. All charges of the Guarantor related to the issuance or performance of this Guarantee (including, but not limited to, the negotiation, payment, extension or transfer hereof) shall be borne by the Contractor and under no circumstances shall be charged to the Employer by the Guarantor.
9. This Guarantee shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the High Court of the Republic of South Africa.
10. This Guarantee, with the required demand notice, shall be regarded as a liquid document for the purposes of obtaining a court order.

11. The Guarantor chooses as its *domicilium citandi et executandi* for all purposes in connection with this Guarantee at the Guarantor's Address.
12. If at any time any one or more of the provisions of this Guarantee is or becomes illegal, invalid or otherwise unenforceable in any respect neither the legality, validity or enforceability of the remaining provisions of this Guarantee, nor the legality, validity or enforceability of such provision, under the law shall in any way be affected or impaired as a result.

SIGNED at _____ on _____ Day of _____ 202__

For and on behalf of the **GUARANTOR**, duly authorised and warranting such authority

Full Name: _____

Capacity: _____

Witness: _____

[Insert Guarantor's stamp]

PART C2: PRICING DATA

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

C2.1 Pricing assumptions: Option B

1. The conditions of contract

1.1 How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, April 2013 (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.
		(22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.
		(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. The Contractor is paid based on the actual quantities of work performed as opposed to the quantities set out in the Bill of Quantities. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time. With this pricing method, the Contractor bears the risk for his pricing of the bill and the Employer bears the risk for changes in the quantities.

1.2 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 instructions to do work or 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.

1.3 Guidance before pricing and measuring

- 1.3.1 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 (April 2013) the requirements of the tender (if any) and the Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.
- 1.3.2 The NEC approach to the P & G bill assumes use will be made of method related charges for Equipment applied to Providing the Works based on durations shown in the Accepted Programme, fixed charges for the use of Equipment that is required throughout the construction phase, time related charges for people working in a supervisory capacity for the period required, and lump sum charges for other facilities or services not directly related to performing work items typically included in other parts of the bill.

1.3.3 The P & G section of the bill is not used for the assessment of compensation event

2. Measurement and payment

2.1 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
Prov sum ²	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

2.2 General assumptions

- 2.2.1 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.
- 2.2.2 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.
- 2.2.3 An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.

² Provisional Sums should not be used unless absolutely unavoidable. Rather include specifications and associated bill items for the most likely scope of work, and then change later using the compensation event procedure if necessary.

- 2.2.4 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.
- 2.2.5 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.

2.3 Amplification of or assumptions about measurement items

For the avoidance of doubt 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.

2.4 Provision for CIDB B.U.I.L.D. Program

Tendered rate should be for full compensation for all costs to be incurred for complying to the requirements and specifications of the CIDB B.U.I.L.D. programme. In this project, the CIDB Standards for the Enterprise Development (CPG) and Skills Development (CSDG) through Infrastructure Contracts will be applicable.

- 2.4.1 The contract participation goals (CPG) for the enterprise development of targeted enterprises will be 5% of the construction value of the works. Including civil engineering (CE) works and specialist electrical and lighting installation works.
- The Contractor shall dedicate a minimum of 5% of the total construction contract value to targeted subcontractors or joint venture partners registered with the CIDB in either EB or CE grading relevant to the work packages assigned.
 - The Contractor shall provide developmental support to these subcontractors, including technical guidance, access to resources, skills transfer, and mentoring, for the duration of their participation in the project.
- 2.4.2 The goals of the skills development standard are to provide workplace training to the interns and up-skill employees in programmes that result in normally accredited outcomes.
- The Contractor shall provide for a minimum skills development goal of 0.25% of the total value of construction works to meet the requirements of CSDG by the end of the contract. This amount will be allocated for skills development to be achieved in the performance of a contract in relation to the provision of different types of workplace opportunities, linked to work associated with a contract culminating in or leading to:
 - a) A part or full occupational qualification registered on the national qualification framework,
 - b) A trade qualification leading to a listed trade,
 - c) A national diploma registered on the National Qualification Framework and /or,
 - d) Registration in a professional category by one of the professional bodies.

Payment will be made monthly subject to proof of full compliance to the requirements and specifications that needs to be provided in a monthly progress report.

C2.2 the *bill of quantities*

The bill of quantities below is only for the scope of works of the project.

Item	Description	Unit	QTY	Rate	Amount	ACSA Estimates
1	PRELIMINARY AND GENERAL					
1,1	<u>FIXED CHARGE ITEMS</u>					
1.1.1	Airside Induction Training and Airports Permits	Sum	1		R	
1.1.2	Site Establishment, Site Office and Storage	Sum	1		R	
1.1.3	Insurance (Professional Indemnity, Contract Works and Public Liability)	Sum	1		R	
1.1.4	Performance Bond (10% of Contract Value)	Sum	1		R	
1.1.5	Miscellaneous ACSA Direct Costs	Prov Sum	1		R3 000 000	
1,2	<u>TIME RELATED ITEMS</u>					
1.2.1	Plant and Equipment	Sum	1		R	
1.2.2	Project Management and Supervision	Sum	1		R	
1.2.3	Engineering	Sum	1		R	
1.2.4	Site Crew	Sum	1		R	
1.2.5	Compliance with the Occupational Health and Safety Act (OHSA) and Regulations (including the Construction Regulations,	Sum	1		R	
1.2.6	Compliance with the Environmental Specifications	Sum	1		R	
1.2.7	Topographical Surveys	Sum	1		R	
1.2.8	Setting Out the Works	Sum	1		R	
1.2.9	Location and Protection of Existing Underground Services	Sum	1		R	
1.2.10	Any other items the tenderer deems necessary to complete the installation (Tenderer to qualify in cover letter).	Sum	1		R	
	a)					
	b)					
	c)					
	CARRIED FORWARD				R	R -

Item	Description	Unit	QTY	Rate	Amount	ACSA Estimates
	BROUGHT FORWARD				R	R -
2	DESIGN DEVELOPMENT					
2,1	Detailed Engineering Design	Sum	1		R	
2,2	Design Reviews and Approval by Client and Regulatory Authority	Sum	1		R	
2,3	Provision of Workshop Designs and Drawings	Sum	1		R	
3	SUPPLY AND INSTALL					
	<u>YANKEE, KILO, LIMA, ECHO, ALPHA, CHARLIE & HOTEL TAXIWAYS</u>					
	Supply and install Airfield lighting cables to SANS 1411 Part 1 and ICAO: Aerodrome Design Manual Part 5, Electrical Systems (DIN VDE 0271 and IEC 502)					
3,1						
3.1.1	Airfield Conductors	Sum	1		R	
3.1.2	Airfield Conductor Terminations	Sum	1		R	
3.1.3	Airfield Conductor Connectors	Sum	1		R	
3.1.4	Earthing	Sum	1		R	
3.1.5	Warning Tape	Sum	1		R	
3,2	Trenching, backfilling and compaction of 400 mm wide trench and premix re-instatement (including layerworks) for sleeves 700 mm below finished ground level complete with sand bedding and cover.					
3.2.1	Drawpits / Manholes aprox. 1m dia x 1m deep, complete with 20 Ton special manhole cover with 20 kN ultimate load bearing capacity	Sum	1		R	
3.2.2	Sleeves and Conduits Complete with Draw Wire	Sum	1		R	
3.2.3	Core Drilling	Sum	1		R	
3.2.4	Slotting or Saw Cutting	Sum	1		R	
3.2.5	Special Resin filling	Sum	1		R	
3.2.6	Any additional items the tenderer deems necessary to complete this section (Please specify in cover letter)	Sum	1		R	
a)						
b)						
	CARRIED FORWARD				R0,00	R -

Item	Description	Unit	Qty	Rate	Amount R	ACSA Estimates
	BROUGHT FORWARD				R	R -
3,3	Light Fittings (All types supplied and installed with Jig and sighting telescope, complete with mounting can base, lamps and grommets/ connectors etc. in accordance with relevant ICAO requirement)					
3.3.1	Type CAT II & III: 1 x 15W - 6.6A (Unidirectional Yellow LED; Intermediate Holding light)	Sum	1		R	
3.3.2	Type CAT II & III: 2 x 15W - 6.6A (Bi-directional Green Straight Lens; LED type Lead-on-light)	Sum	1		R	
3.3.3	Type CAT II & III: 2 x 15W - 6.6A (Bi-directional Yellow/Green Straight Lens; LED type Lead-on-light)	Sum	1		R	
3.3.4	Type CAT II & III: 2x15W - 6.6A (Bi-directional Green Curved Lens; LED type Lead-on-light)	Sum	1		R	
3.3.5	Type CAT II & III: 2x15W - 6.6A (Bi-directional Yellow/Green Curved Lens; LED type Lead-on-light)	Sum	1		R	
3.3.6	Type CAT II & III: 2 x 15W - 6.6A (Green straight lens, flush taxiway centre line light)	Sum	1		R	
3.3.7	Type CAT II & III: 2x15W - 6.6A (Green curved lens, flush taxiway centre line light)	Sum	1		R	
3.3.8	Isolation Transformers	Sum	1		R	
3.3.9	8" dia shallow bases	Sum	1		R	
3,4	MCR (Constant Current Regulators, Micro-Processor Controlled) to Match Existing MCR Infrastructure and Software Protocol					
3.4.1	Supply and install MCR (Constant current Regulator, Micro-processor Controlled) to Match Existing MCR infrastructure and software protocol	Sum	1		R	
3.4.2	Connection of MCR and CSM equipment above and integration programming into the existing control infrastructure including remote control and monitoring field bus connections	Sum	1		R	
3.4.3	Existing SCADA re-programming to accommodate new taxiway centre line lights and intermediate holding position lights	Sum	1		R	
3.4.4	Testing and Commissioning the Electrical Installation Complete as per Specification	Sum	1		R	
3,5	Decommission and Remove Old System	Sum	1		R	
4	TESTING , COMMISSIONING AND TRAINING					
4,1	Complete Testing and Commissioning of Electrical Installation	Sum	1		R	
4,2	Operating Manuals, Maintenance Manuals, Technical Specifications	Sum	1		R	
4,3	As-Built Drawings and Design Documentation (Data Packs)	Sum	1		R	
4,4	Training of Client Staff	Sum	1		R	
4,5	Issue Completion Certificate and Project Close-Out Report	Sum	1		R	
	TOTAL CARRIED TO SUMMARY				R	R -

C2.2 CALCULATION OF TENDER SUM

TOTAL OF ACTIVITY SCHEDULE	R	-
CONTRACT SKILLS DEVELOPMENT GOAL		
The tenderer shall add 0.25% of the total of activity schedule for the CSDG	R	-
SUBTOTAL 1	R	-
CONTINGENCIES		
The sum provided here is under the sole control of the	R	-
Engineer and may be deducted in whole or in part 10%		
SUBTOTAL 2	R	-
VALUE-ADDED TAX (VAT)		
The tenderer shall add 15% of the subtotal for VAT	R	-
TENDER SUM CARRIED TO FORM OF C	R	-

PART C3: SCOPE OF WORK: WORKS INFORMATION

Document reference	Title	No of pages
C3	Scope of Work: Works Information	

C3 Scope of Work: Works Information

1. SCOPE OF WORK: WORKS INFORMATION

1.1 Background and/or Purpose of this Bid

Since its inception 32 years ago, Airports Company South Africa SOC Limited (ACSA) has transformed into a focused commercial enterprise that is market-driven and customer service oriented. The company was formed in 1993 as a public company under the Companies Act of 1973, as amended, and the Airports Company Act of 1993, as amended.

ACSA operates South Africa's Nine (9) principal airports, comprised of the country's major international airports, namely, O.R. Tambo (ORTIA), Cape Town (CTIA) and King Shaka (KSIA) and the smaller regional airports, namely, Dawie Stuurman International Airport (PLZ), King Phalo Airport (ELN), George Airport (GRJ), Bram Fischer (BRAM), Kimberley Airport (KMB), Upington (UTN). ACSA's registered corporate office operates from Airport Park in Kempton Park right next to the OR Tambo International Airport.

ACSA's vision is to be the most sought-after partner in the world for the provision of sustainable airport management solutions by 2030. ACSA's strategy is to create and operate world-class airports measuring up to international standards, its strategic intent is supported by three strategic pillars, namely:

- Run Airports: Run our airports efficiently, optimally, and innovatively.
- Develop Airports: Optimise assets and plan for new capacity and growth opportunities.
- Grow Footprint: Seek growth opportunities in the continent and world.

1.2 Scope of Work: Works Information

The scope of work involves the design, procurement of materials, construction, installation, testing, and commissioning of the taxiway centre line lighting system at O.R. Tambo International Airport (ORTIA).

The project includes the installation of new airfield ground lighting (AGL) for multiple taxiway sections to enhance aircraft guidance, operational safety, and compliance with international aviation standards.

To inform their technical proposal and methodology, tenderers are required to download and review the following annexures:

Annexure F: General Lights Layout Diagram – Highlights the taxiway sections with existing operational lights and indicates the planned locations for all new installations.

Annexure G: Taxiway Centre Line Light Coordinates – Provides the precise geospatial coordinates for each required taxiway centreline light

Refer attached Combined Works Information document number MCP2160079-CSOW-001 Rev 01 and associated Appendices for further details on the scope of work.

1.2.1 Plant, equipment and materials

The contractor shall make provision for all plant, equipment and material required for the complete construction of the project. The availability of this should correspond to the “issued for construction” schedule agreed upon by ACSA.

All plant and equipment used on site shall comply with the safety requirements as defined in the Occupational Health and Safety Act (Act 85 of 1993), the Civil Aviation Regulations, and all applicable airside operational safety standards. This includes, but is not limited to, compliance with ACSA’s Airside Safety Regulations, ICAO Annex 14 requirements, and the relevant provisions governing work in live airport environments. Equipment used must be suitable for deployment on active airside areas and shall not interfere with aircraft movements, navigational aids, or critical infrastructure.

1.2.2 Fabrication, testing and delivery

Fabrication or assembly of airfield lighting components (such as transformers, isolating connectors, junction pits, and control panels) may be completed at the Contractor’s designated workshop or the supplier’s facility prior to delivery to site.

All plant, lighting equipment, cables, and materials that form part of the works shall be subject to the following testing and certification procedures prior to acceptance by the Employer:

Contractor Internal Testing (CIT): Preliminary testing and verification performed at the supplier or contractor’s premises prior to FAT and SAT. These tests shall be witnessed by the Supervisor.

Factory Acceptance Testing (FAT): A full functional and compliance inspection conducted prior to delivery to site. This shall be witnessed by the Employer and the Supervisor, and must verify that all materials meet ICAO, SANS, and ACSA technical specifications.

Site Acceptance Testing (SAT): Final on-site testing and inspection prior to commissioning. This shall be witnessed by the Employer, the Supervisor, and relevant stakeholders, and will include photometric, electrical continuity, and control system integration tests.

Following completion of each acceptance test procedure, the Contractor shall rectify all deviations and non-conformances. Only upon successful completion of the FAT shall plant and lighting equipment be delivered to site and placed into the Contractor’s designated airside construction storage facility.

All equipment and material shall be appropriately packaged, crated, and sealed to ensure full protection during transit and offloading, in accordance with airport logistics and handling protocols.

1.2.3 Construction works

As far as reasonably practicable, the construction works shall be executed with minimal disruption to normal airport operations. Airport operations will always take precedence, and the Contractor shall plan and execute the works in full compliance with operational requirements. It is acknowledged that certain works may only be permitted during periods when parts of the airfield are closed, as determined by Airport Operations and Air Traffic Management.

The construction site is located entirely within the airside environment of O.R. Tambo International Airport, within controlled and restricted access zones that require strict compliance with airport operational protocols. All personnel employed by the Contractor who are required to access the construction site shall undergo the following mandatory training and clearance procedures:

Airside Induction: Conducted by an ACSA-accredited training service provider and valid for the duration of the project.

Airside Vehicle Permit (AVP) and Driver Permit (ADP): Required for any personnel operating vehicles within the airside areas.

Permit to Work (PTW): Required for specific high-risk work activities (e.g., trenching, electrical work).

The construction will take place in a live operational environment, with active aircraft movements in close proximity. As such, the Contractor shall implement all necessary safety, environmental, and security precautions to protect airport users and ensure uninterrupted airport operations. Barriers, flagmen, lighting, and coordination with Apron Control and ATNS shall be strictly observed.

The sequencing and scheduling of works shall be managed by the Project Manager, in consultation with the Employer, Airport Operations, Safety Management, and other relevant stakeholders, and shall account for operational windows, night work approvals, and possible movement restrictions.

Explicit Technology Requirements:

The project mandates LED-based taxiway centre line lights, intermediate holding position lights, and apron taxi-lane lighting (all energy-efficient and compliant with CAT III operations). LED lights should be maintainable and must include replacement or spare parts.

A Lighting Control and Monitoring System (LCMS) is required for remote management.

1.2.4 Quality control and quality assurance

The contractor shall have a well-organised quality control and quality assurance system based on ISO 9000 series. The contractor shall submit a complete quality control and quality assurance system for review and acceptance by the employer.

1.2.5 Other requirements

The following issues must be considered when planning and executing the construction works in airside and fuel storage depot:

- The airport is a live operational environment and disruptions to operations must be on a planned basis, unless it involves emergency situations/incidents.
- Continuous operation of the airport requires a staged and/or predefined approach to be followed when performing construction work.
- Waiting periods between construction activities that are not described in the “issued for construction schedule” will not be the responsibility of the employer.

- Performing certain construction activities may be difficult to perform during the day and may have to be carried-out afterhours or over the weekends. This will be prior defined and agreed with the Employer.
- Proper isolation and safe-working procedures of the airports must be implemented. There are also adjacent piping and cabling that must be surveyed prior to excavation. ACSA will not be responsible for deviations and costs as a result of incidents where this prior diligence is not performed.

1.2.6 Handover to client

Upon completion of the construction works and correction of all defects on the defect list, the contractor shall handover the site back to the client. All the documentation, reports, model, investigations and studies generated during the design development and construction works, including as-built drawings, design document, data sheets, guarantee certificates, operations and maintenance manuals shall be handed over to the client.

1.2.7 General work operations include:

- (i) Negotiate with and appoint selected subcontractors, independent laboratory and others as instructed.
- (ii) Compile and submit for approval detailed site safety plan and construction method statement.
- (iii) Radio license where applicable.
- (iv) All site staff attend safety training course and obtain ACSA permits.
- (v) Establishment on site of the camp and construction equipment on the airside, including airside permit requirements.
- (vi) Structured and detailed interaction with various role players at the airport to ensure timeous completion of the works for each shift. These role players include the staff of the Airport Management (AM) and the Air Traffic Control (ATC). Management of the project planning and operational procedures for working airside.
- (vii) Cleaning of the construction area after each work shift to the satisfaction of the Engineers and AM staff.
- (viii) Compliance with OHSA.

1.2.8 Existing Underground Services

- The Contractor shall acquaint himself with the position of all existing services before any excavation or other work likely to affect the existing services is commenced.
- The Contractor shall be held responsible for any damage to existing services caused by or arising out of his operations and any damage shall be made good at his own expense.
- The Contractor shall liaise with the Engineer timeously before any connections are made.

1.2.9 Changes to Scope of Work

It is a condition of this contract that the employer reserves the right to limit the total expenditure on the Works due to possible budget constraints. Should the tender sum exceed the budgeted amount, the scope of the works may be reduced at any time before or during the contract period to ensure that the final contract amount does not exceed the budgeted amount.

1.2.10 Location of the Works

The site of the Works is situated Landside at O.R. Tambo International Airport. The site is under the jurisdiction of the Airports Company South Africa (ACSA).

Access to the site can be obtained from the Super South Gate or North Gate.

1.2.11 Temporary Works

The Contractor must obtain written permission from the Engineer before construction of any temporary works may commence. Temporary works will include the following:

- (a) Signage and markings for the surface movement of aircraft and vehicles
- (b) Electrical connections to maintain circuits for the safe operation of elements.
- (c) Placing and removal of barricades.
- (d) All facilities within the Contractor's construction camp. The site is to be negotiated with ACSA and shall be fenced off using 2,0 m high diamond mesh fencing material. The design shall comply with the specifications where, provided in these documents and all statutory requirements such as the Occupational Health and Safety Act and Regulations. The area is to be reinstated upon completion.
- (e) Temporary backfilling of excavations (at the end of each work shift) within the safety zone next to the runway and taxiways. The backfilling must comply with ICAO requirements.
- (f) Temporary backfilling of excavations (at the end of each work shift) within the safety zone next to the taxiways. The backfilling must comply with ICAO requirements.

2. ENGINEERING

2.1 Design Services and Activity Matrix

The responsibilities for design and related documentation are as follows:

DESCRIPTION	RESPONSIBILITY
Detailed design and related construction drawings	Contractor (to be reviewed, accepted and signed by a registered professional engineer)
Design temporary works (Section 1.5): Items (a) to (f) Other	Contractor (to be reviewed, accepted and signed by a registered professional engineer)
As-built drawings: Provision of data and marked up drawings Preparation of drawings	Contractor (to be reviewed, accepted and signed by a registered professional engineer)

- All design documentation, including temporary works and as-built drawings, must be reviewed, approved, and stamped by a registered professional engineer in compliance with applicable regulations.
- The Contractor shall ensure that all submitted drawings meet statutory and contractual requirements before approval.

2.2 Employer's Design

No Employer's designs are specified.

2.3 Contractor's Designs Brief

No Contractor's designs brief is specified.

2.4 Drawings

The Contractor shall provide all the as-built drawings required upon completion of the works.

2.5 Design Procedures

No design procedures are specified.

2.6 Construction in Confined Areas

Working space for some of the work to be carried out under this contract is restricted. The construction method used in these confined areas largely depends on the Contractor's plant. However, the Contractor must note that measurement and payment will be according to the specified cross-sections and dimensions irrespective of the method used, and that the rates and prices tendered will be deemed to include full compensation for difficulties encountered, while working in confined areas.

3. PROCUREMENT

3.1 Preferential Procurement Procedures

The Works shall be executed in accordance with the Tender requirements and submitted by the Contractor in his Returnable Schedules.

3.2 Subcontracting

The Contractor shall provide any necessary facilities in order to manage any of their subcontractors to ensure that the works allocated to them are carried out in accordance with:

- The programme of works
- The contract requirements and
- In particular the requirements concerning access to and from the airport facilities at the beginning and end of working shifts. The Contractor shall also ensure that the Sub-Contractor complies with all the requirements as contained in the Contract Documentation and in particular the Safety Plan, Environmental Management Plan and Operational procedure requirements.

4. CONSTRUCTION

4.1 Works Specifications

The design, the manufacture of equipment and the complete installation shall be carried out and tested in accordance with the latest issue or amendments of the following regulations, as applicable:

- ICAO – International Standards and Practices: Aerodromes – Annex 14 to the Convention on International Civil Aviation (fourth edition – July 2004 and subsequent amendments) and related standards.
- ACSA – Operational Airfield Regulations (July 1998 as amended)
- The Occupational Health and Safety Act of 1993
- The Local Fire Regulations
- The National Building Regulations
- In co-operation and conjunction with ACSA's Civil Engineering Department at ORTIA.

The Contractor shall issue all notices and pay all the required fees in respect of the installation to the authorities, and shall exempt the employer, principal Contractor and Engineer from all losses, claims, costs or expenditure which may arise as a result of the Contractor's negligence to comply with the requirements of these regulations.

It shall be assumed that the Contractor is conversant with the above-mentioned requirements. Should any requirements, by-laws or regulation, which contradicts the requirements of this document, apply or become

applicable during erection of the installation, such requirements, by-law or regulation shall overrule this document and the Contractor shall immediately inform the Engineer of such a contradiction. Under no circumstances shall the Contractor carry out any variations to the installation in terms of such contradictions without the written permission to do so from the Engineer.

4.2 Plant and Material

Where required, requirements for proof of compliance with materials specifications, submission of samples of materials and finishes, requirements for shop drawings, are stated in the standard or project specifications. This will also apply to the subcontracts.

All materials used in the works shall, where such mark has been awarded for a specific type of material, bear the official mark of the SANS (SANS). Written proof shall be obtained for any materials not bearing the official mark of the SANS.

4.3 Construction Equipment

Where applicable, minimum requirements for equipment are specified in the Standard and Project specifications.

The Contractor shall indicate in his Construction Method Statement how he will manage an emergency where a plant item breaks down during an operation being undertaken on the airside within the 50 m restriction zone, to ensure timeous opening of the taxiway (i.e. all limited occupation period works, especially runway tie-in areas between stop-bar and runway shoulders).

4.4 Site Establishment

4.4.1 Services and Facilities Provided by the Employer

The location of the proposed airside construction camp shall be subject to ACSA's approval. The Contractor must liaise with ACSA to find a suitable site. Approval for the establishment of a construction camp must be obtained from ACSA. The Contractor is responsible for all arrangements for obtaining approval, establishment and subsequent removal and reinstatement of his construction camp.

close to the construction camp, shall be adequately demarcated and fenced off if necessary or so instructed by the Engineer.

All regulations and local authority ordinances, as regards smoke emissions and noise abatements shall apply and compliance will be enforced as well as height restrictions and any required obstacle markers.

4.4.2 Facilities Provided by the Contractor

The Contractor shall make his own arrangements for the supply of electrical power, water telecommunication services, ablution facilities, sewer services, first aid facilities and other services, the payment thereof and all reinstatements required upon completion. No direct payment will be made to the Contractor for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

The Contractor shall make arrangements at his own cost for telephone and facsimile facilities, with cellular phones being acceptable.

Airside permits must be obtained by the Contractor from ACSA in accordance with the requirements of the Contract documents prior to commencing any work.

4.4.3 Storage and Laboratory Facilities

The Contractor shall make a storage room available for use by the Engineer's staff. A commercial laboratory shall undertake material testing for the Engineer.

4.4.4 Other Facilities and Services

The Contractor shall be responsible for the removal of all waste generated from the airport property and the proper disposal thereof elsewhere at his own cost.

If required by the Engineer, the Contractor shall supply portable chemical toilet facilities next to the construction site for his staff as well as for the Engineer's supervisory staff. These facilities must daily be erected and removed on a daily basis and regularly serviced to the satisfaction of the Airport Authorities and the Engineer.

4.4.5 Vehicle and Equipment

The requirements (e.g. permits, etc.) for vehicles and drivers operating on the airside at O.R. Tambo International Airport are specified in the Airside Manual.

4.4.6 Advertising Rights

Only one sign board each, for the Contractor and his subcontractors, may be erected at the entrance to the construction camp.

4.4.7 Notice Boards

A construction notice board complying to the SAICE specifications must be provided and erected at a position to be agreed with the Engineer. The cost of the supply and erection of this notice board must be included in the establishment cost of the Contractor.

4.5 Site Usage

Restrictions on the site usage are stated in the Airside Manual.

4.6 Alterations, Additions, Extensions and Modifications to Existing Works

The Contractor must satisfy himself that the dimensional accuracy, alignment, levels and setting out of existing components are compatible with the proposed Works. Where this is not the case the Engineer's Representative must be notified in writing at the earliest possible time.

4.7 Water for Construction Purposes

The Contractor must make all arrangements for the transport, storage and distribution of water required for construction purposes and his own use.

4.8 Survey Control and Setting Out of the Works

The Contractor shall be responsible for the setting out of the works. The setting out of the reticulation system and supply line shall originate from the existing stand boundary beacons, which have been established by the owner.

The Contractor shall ensure that all these beacons are located before work commences, and shall bring to the Engineer's attention any beacons, which are missing. At the end of the work, before payment of the final certificate, the Engineer will check all the beacons, and those missing will be replaced by the Employer at the Contractor's cost. It is suggested that to obviate damage to beacons, they be clearly marked with stakes by the Contractor before the commencement of any clearing.

The Contractor shall peg out the routes of all services within two weeks after being appointed and confirm it with the Engineer before any work commences.

5. MANAGEMENT

5.1 Management of Works

5.1.1 Planning and Programming

The Contractor's programme must be based on the Working Times defined in paragraph 1.3.1 above. The Contractor's attention is drawn to the limited occupation (night-time) periods applicable to this project.

5.1.2 Time

Time is of the essence and all construction work must be completed on the schedules/stipulated times. Sufficient manpower shall be made available to cope with the construction schedule dates.

Any cost item which the prospective tenderer regards necessary for the proper functioning or completion of an item or element, shall be added to the tender rates as there must be no uncertainty that the tender rates and total tender price is all inclusive.

Prospective tenderers shall make sufficient allowance for site management and administrative staff. The project scope is not final and fixed and it is anticipated that comprehensive site communication (via site instructions/queries, etc) will transpire during the execution of this contract.

Site co-ordination meetings will be held and the Contractor's site manager shall attend these meetings and promptly implement the requirements put forward.

Prospective tenderers shall allow in their tender rates for all aspects which could lead to non-continuity of work, disruption or any other event which is regarded normal to fast track type of construction projects.

5.1.3 Quality Plans and Control

It will be the responsibility of the Contractor to undertake appropriate quality control and quality assurance measures during manufacture as well as on site.

The level of quality of materials and workmanship is clearly set out in the documents. In general, all materials shall comply with the relevant SABS or equivalent standard specifications. In the absence of a suitable specification, the materials may be those available from suppliers provided they are approved by the Engineer. Likewise, all systems of working and workmanship shall comply with the relevant SABS or equivalent codes of practice or otherwise be approved by the Engineer.

The Contractor will be expected to comply with this section of the specification in great detail throughout the contract and the Engineer will carry out ad hoc audits of the system from time to time.

Tenderers should take note of the special requirements and the cost implications to be included, when making up their tender.

5.1.4 Flexibility of Construction Activities

All construction activities are under the direct control of the Project Manager who will liaise with the Engineer and as such he has the right to instruct the Contractor to deviate/adjust/direct/modify the Contractor's schedule and/or activities within the limits of the time for completion specified for this contract to serve the best interests of the project. The Contractor shall be flexible and able to adapt to changing circumstances.

5.1.5 Execution of contract simultaneous with others

Prospective tenderers are advised that other Contractors will install equipment all under other contracts during the construction period of this contract and reasonable access must be afforded to such Contractor(s) at all times. All tender rates shall be deemed to fully allow for this provision.

5.1.6 Arrangements with the supply authority

The costs of all arrangements with the Supply Authority with regard to inspections, tests and requirements to comply with regulations, and the actual costs of inspections, tests, provision of labour, test equipment, etc shall be for the Contractor's own account.

For this installation the Airports Company South Africa shall make permanent power available to the Contractor from the existing power and lighting complex and no connection fees shall be required.

5.1.7 Installation work

It shall remain the Contractor's responsibility to carry out the work in accordance with this document, to provide the logistics and infrastructure required for the works, to provide adequate full-time supervision at the works, to programme and manage the works, to ensure compliance with Codes, Standards and Regulations, to provide registered and qualified site staff at all times and in accordance with the Laws and Regulations.

The Engineer's representative will inspect the installation from time to time during the progress of work. Discrepancies will be pointed out to the Contractor and these shall be remedied at the Contractor's expense. Under no circumstances will these inspections relieve the Contractor of his obligations in terms of the document nor will these inspections be regarded as final approval of the works or portions thereof.

Where the Engineer has appointed a full-time representative at the works, this representative shall not be regarded as relief of the Contractor's obligations in terms of the documents.

The Engineer's inspection shall only be carried out after the Contractor has carried out his own preliminary inspection to ensure that the works are completed and comply with the documents.

The Engineer's inspection shall therefore not be regarded as supervision, fault listing, quality assurance or site management. Inspection and testing procedures are fully detailed in the specifications.

5.1.8 Co-ordination

The drawings and schedules are of a schematic nature and unless specific dimensions to the equipment are shown, the Contractor shall co-ordinate the installation of equipment and fittings with the other Contractors and trades on site before installation. Should agreement not be reached or if the equipment or fittings cannot be installed in the obvious locations to conform to the design, the Engineer's ruling shall be obtained beforehand.

5.1.9 Workshop designs and drawings

The Contractor shall submit to the Engineer detailed or workshop drawings of all items to be manufacture, assembled or installed for approval prior to the commencement of the manufacture or construction of such works.

The tenderer shall submit with his tender comprehensive details of standards and criteria, which will be used in the detailed designs, preparation of workshop drawings, manufacture and testing of equipment.

5.1.10 Design responsibilities

The design responsibility of the installation, general layout, arrangement and the functionality of the systems rest with the Contractor with regard to interpretation of the employers requirements. The detailed installation design responsibility, also, rest with the Contractor with regard to the design for installation and manufacturing and the compliance to specifications and requirements, which are stipulated in the contract documents and on the drawings.

The cost of complying with these requirements is deemed to be covered by the tendered rates for the Contractor's General Obligations.

5.1.11 Quality of Materials

All material shall be of high quality and suitable for the conditions on site. These conditions shall include weather conditions as well as conditions under which materials are installed, stored and used. Should the

materials not be suitable for use under temporary site conditions the Contractor shall at his own cost provide suitable protection until these unfavourable site conditions cease to exist.

All materials proposed by the Contractor shall be tested. The test, as well as the materials, shall be approved by the Engineer prior to such materials being built into the works and all costs involved shall be deemed to be included in the quoted rates.

5.1.12 Safety and Security

The Contractor shall appoint a responsible person and assistant and their names shall be forwarded to the ACSA's Senior Project Practitioner, Xolani Khumalo before any work may commence on site. The responsible person shall legally be responsible that safety measures are exercised on site by his workforce. No work may be executed on site if neither of these two persons is on site.

The Contractor will be responsible for the safety of his personnel on site at all times. All laws, rules and regulations shall be strictly followed in this regard and all the necessary precautions and measures shall be taken to ensure the safety of personnel, the public and equipment.

Where work is to be carried out on or in the proximity of live electrical equipment the Contractor shall make all the necessary arrangements with the relevant Supply Authority to isolate and earth such equipment. These arrangements shall be in writing and copies thereof shall be submitted to the Engineer. The Contractor shall also adhere to any requirements or procedures the Local Supply Authority may have in this regard. None of these arrangements shall, however, alleviate the Contractor's responsibilities in terms of this contract or any Laws and Regulations.

5.1.13 Protection of Other Services and Structures

The Contractor shall take all the necessary precautions to protect existing services, finishes and structures during the execution of the contract. All repairs and damages shall be the responsibility of the Contractor and the cost thereof shall be borne by the Contractor.

The Contractor shall exercise extreme care when excavations are made to avoid damage to existing or newly installed services. Any damages to other services will be rectified forthwith and the costs for the rectification will be recovered from the Contractor.

5.1.14 Finishing and Tidying

In view of the intense concentration of construction activities likely to be experienced during the construction period, progressive and systematic finishing and tidying will form an essential part of this contract. At no time may spoil rubble, materials, equipment of unfinished operations be allowed to accumulate in such a manner as to unnecessarily impede the activities of others and in the event of this occurring, the employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area (3) concerned without prejudicing the rights of others to institute claims against the Contractor on the ground of unnecessary obstruction.

Finishing and tidying must not simply be left to the end of the contract. All finishing and tidying shall be carried out to the best advantage of the project as a whole and in the close co-operation with other Contractors.

5.1.15 Variations to Contract Price

All costs for variations to the contract shall be done in accordance with the rates that shall be completed by the Electrical Contractor in the pricing section of this document.

Any items or variations for which rates have not been included in the Schedules shall be priced as non-scheduled items.

All instructions, directions or explanations to the electrical Contractor shall be given in writing by the principal Contractor. The Contractor shall not accept oral instructions from any party whatsoever.

5.1.16 Maintenance and Guarantee

The equipment and installation included in the contract shall be guaranteed and maintained for a period of twelve months from the date of acceptance by the Engineer in all respects for continuous service. The tender price shall include the above.

For the full duration of the maintenance period, the Contractor shall be responsible for the complete installation with respect to the necessary replacement and adjustments to the equipment to ensure the proper working thereof.

5.1.17 Blasting

No blasting is allowed at the airport.

5.1.18 Protection of Area

The Contractor shall confide his operations to as small an area as may be practical for the purpose of constructing the works.

Only those trees directly affected by the works and such others as the Engineer may direct in writing shall be cut down and stumped.

On completion of operations the ground surface where it may have been disrupted by the Contractor shall be restored to its original condition by filling in all ruts with material similar to the material within the rut and levelling the ground and where necessary planting grass and shrubs as may be required. Any boundary fences, which have been removed or damaged, shall be repaired and/or reinstated at the Contractor's expense.

The natural vegetation must not be disturbed other than in areas where it is essential for the execution for the work or where directed by the Engineer.

5.1.19 Disposal of Waste Material

All waste material as result of the works including the demolished trees, brush, rubbish, fences and all other objectionable material will be removed and disposed of at a legal site found by the Contractor and approved by the Engineer.

5.1.20 Format of Communications

All instructions or requests need to be confirmed in writing through:

- Site instructions
- Requests for inspections

5.1.21 Key Personnel

The Contractor and Engineer must compile a schedule of their Key Personnel with their contact numbers and keep it updated. The list must be made available to the Engineer, Employer and Contractor.

5.1.22 Management Meetings

The following formal meetings will be held at the office of the Engineer's Representative between the Representatives of the Employer, Engineer and the Contractor:

- Daily kick-off meeting
- Weekly progress and technical meeting
- Monthly site meeting

The Representatives must have the necessary delegated authority (site agent level on weekly meeting and Contracts Director level on monthly meetings) in respect of aspects such as planning, change management and health and safety.

5.1.23 Daily records

The Contractor must keep daily records of resources (people and equipment employed) and site diaries in respect of work performed on the site. A copy of the previous day's daily record must be provided to the Engineer on a daily basis.

5.1.24 Payment Certificates

The Engineer's certificate will be issued only after receipt by him of a draft certificate prepared by the Contractor at his own expense in the form prescribed by the Engineer. The cost of duplicating and delivering copies of the certificate to the Contractor, the Engineer and the Employer shall be borne by the Contractor. The Engineer and the Employer shall require three (3) sets of A4-sized paper copies in total.

5.1.25 Permits

All requirements in connection with the application for and usage of permits are as stated in the contract documentation.

5.1.26 Insurance Provided by the Employer

For information on the Employer Insurance, refer to ACSA Insurance Clauses in Annex B, Part C1.2 of the contract.

5.2 Health and Safety

Health and Safety requirements and procedures are presented in Annex B, Part C5.

5.2.1 Barricades and lighting

Requirements for the provision and usage of barricades and lighting are stated in the contract documentation.

5.2.2 Traffic Control

Safety requirements and procedures where the Contractor has occupation of taxiways, runways or roads are stated in contract documentation.

PART C4: SITE INFORMATION

Document reference	Title	No of pages
C4	Site Information	

C4 Site Information

SITE INFORMATION

1. Key site data

The airside is a restricted area with stringent access control measures put in place. The Contractor is reminded that this is a National Key Point and as such must adhere to all airport's rules and regulations regarding health safety, environment, security, fire and access control.

1.1 Access

- The Contractor shall liaise with ACSA Security Staff in order to obtain access permits for his staff and vehicle working at the airport.
- Personnel and vehicles entering or leaving the site will be subjected to routine searches.
- The Contractor shall obtain the "gate permit" from the Project Manager before material and equipment are brought and removed from the airside.
- The Contractor shall include in his rates the costs for access permits and no extra payment or claim of any kind will be allowed on account of difficulties of access to site.

1.2 Permits

- The Contractor shall familiarize himself with ACSA's safety and security requirements relating to permits to prevent any unnecessary work delay.
- This shall include the permit application process.
- The Contractor shall have no claim against ACSA in the event that a permit request is refused.
- The following table is not all inclusive, but is provided for illustration purposes:

Permit	Required by/for	Department
AVOP – Airside Vehicle Operator permit	All drivers of vehicles on airside	ACSA Safety
Airside Vehicle Permit	All vehicles that enter airside	ACSA Safety
Basement Parking Permit	All vehicles allowed to enter the delivery basement	ACSA Parking
Personal Permit	All persons employed on the airport	ACSA Security
Cell Phone Permit	All persons taking cell phones to airside	ACSA Security
Tools & Laptop Permit	All persons taking tools and laptop to airside	ACSA Security
Camera Permit	All persons taking camera equipment to airside	ACSA Security
Hot Works Permit	All welding and/metal cutting work on the airside	ACSA Safety
Airside Projects/Works Permit	For all projects on the airside	ACSA Airport Operations / Safety
Low/Medium Voltage Permit to Work	For all work on substations, distribution boards and cables	ACSA Electrical Maintenance

- Proof of having attended the Airside Induction Training course is required for all personal permit applications. This is for all personnel involved with or responsible for the implementation of various aspects of the national civil aviation security programme and those authorized to have unescorted access to airside areas receive initial and recurrent security awareness training.
- Fees are levied for these courses. Fees are further levied for all permit renewals and refresher courses where applicable.
- No work shall be done without a written permission in the form of a permit/works order.
- Proof of having attended the General Aviation Security Awareness Training course is required for all personal permit applications.

1.3 Cell phones and two-way radios

- Use of cell phones are not permitted unless the user is in possession of an appropriate Airport permit for the device.
- Cell phone permit issuing authority lies with the ACSA Security department.
- The Contractor will not be allowed to use two-way radios at the Airport unless these radios are of the type, model and frequency range as approved by the ACSA IT department.
- Approved radios may be arranged via said department – payment will be for the account of the Contractor.

1.4 Hidden and other services within site

There might be water and sewer pipes located underground. Also, there are other cables going through the trenches and these must be treated as live cables. There are also communication cables located underground

WORKS INFORMATION

ANNEXURES

Annex A: Occupational Health and Safety Specifications

This specification contains comprehensive occupational health and safety specifications.

LIST OF ABBREVIATIONS

ACSA	Airports Company South Africa
GAR	General Administration Regulations
GSR	General Safety Regulations
OHSA	Occupational Health and Safety Act 85 of 1993
OHSS	Occupational Health and Safety Specification
SABS	South African Bureau of Standards

1. INTRODUCTION

1.1 Purpose of the Occupational Health and Safety Specification

The purpose of the OHSS is to assist Contractors to achieve compliance with the Occupational Health and Safety law, in order to reduce incidents and injuries. The OHSS will be implemented during the construction of this project or any construction activity that the Employer has control over.

The OHSS is a performance specification to ensure that the Employer and any bodies that enter into formal agreements with the Employer viz. Agents, Contractors and Suppliers achieve an acceptable level of OHS performance. No advice, approval of any document required by the OHSS such as hazard identification and risk assessment action plan or any other form of communication from the Employer shall be construed as an acceptance by the Employer of any obligation that absolves the Contractor from achieving the required level of performance and compliance with legal requirements. Further, there is no acceptance of liability by the Employer which may result from the Contractor failing to comply with the OHSS, i.e. the Contractor remains responsible for achieving the required performance levels.

1.2 Implementation of the Occupational Health and Safety Specification

This OHSS forms an integral part of the Contract, and Contractors are required to make it an integral part of their Contracts with Sub-Contractors and Suppliers. It will be disseminated by the Employer to persons responsible for the design of the infrastructure works, who will ensure that it is included in the Tender Document(s) issued to prospective Contractors. The prospective Contractors shall incorporate the requirements of the OHSS in their submission of tenders to the Employer.

This specification must be read in conjunction with the OHS Act No 85 of 1993 (as amended), the Regulations as published in Government Gazette No 37305 of 7 February 2014 as well as the General Safety Regulations published in Government Notice No. R 1031 of 30 May 1986, as amended.

The OHS Act Agreement in this document (Returnable Schedules) must be fully completed by the Contractor.

STANDARD OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

2.1 Scope

This OHSS covers the requirements for eliminating and mitigating incidents and injuries in all Employer controlled projects.

The scope also addresses legal compliance, hazard identification and risk control, promoting a health and safety culture amongst those working on ACSA projects and those affected by the activities taking place in and around them.

2.2 Interpretations

2.2.1 Application

The OHSS contains clauses that are generally applicable to building / construction and that impose pro-active controls associated with activities that impact on human health and safety as they relate to plant and machinery.

Compliance to the requirements of the OHSA, Construction regulations and General Safety Regulations is in addition to the requirements of the OHSS and is part of the Contractor's responsibility. The Employer will through the Agents, as appointed, monitor that the Contractor complies with the requirements of the OHSA and will not prescribe to the Contractor how such compliance is achieved.

Definitions

The definitions used will be those set out in the Regulation Gazette No 37305 of 7 February 2014 with the following addition:

ACSA: Airports Company South Africa

Hazard Identification and Risk Assessment and Risk Control:

Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Management Plan:

Means a documented plan which addresses the hazards identified and include safe working procedures to mitigate, reduce or control the hazards identified.

Induction Training:

Means once off introductory training on general health and safety issues given to all employees before commencement of work on site.

Risk:

Means the probability or likelihood that a hazard can result in injury or damage.

Site:

Means the area in the possession of the Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Contractor and approved for such use by the Engineer.

The Act:

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and Regulations promulgated there under.

Contractor:

The Contractor terminology used in these specifications shall be deemed to cover Principal Contractor, Contractors and Subcontractors.

3. REQUIREMENTS AT TENDER STAGE

The Contractor shall make available the following with his completed tender:

A Preliminary Health and Safety Plan as described in Regulation 7 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2014 and this specification and will be subject to approval by the Employer. This will include a Hazard Identification and Risk Assessment appropriate to the project, expansion of Annexure D, and a declaration to the effect that he has the competence, completion of Occupational Health and Safety Questionnaire, and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014.

Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor is not able to carry out the work under the contract safely in accordance with the Construction Regulations and may result in the tender being disqualified.

4. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

Prior to the commencement of construction work but not later than 7 days after the award of the contract, the Contractor shall, in terms of Regulation 4, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- the demolition of structures and dismantling of fixed plant of height of 3,0 m or more;
- the use of explosives;
- construction work that will exceed 30 days or 300 person-days;
- excavation work deeper than 1,0 m; or
- working at a height greater than 3,0 m above ground or landings.

The notification must be done in the form of the pro forma included under Returnable Schedules (The Occupational Health and Safety Act) of the tender document. See Annexure A for a copy of the notification.

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site.

5. GUIDELINES FOR THE DEVELOPMENT OF A HEALTH & SAFETY PLAN

5.01 Background

In terms of the Construction Regulations [Regulation 5(1)(b)] of the Occupational Health and Safety Act, No 85 of 1993, the Client is required to compile an Occupational Health and Safety specification for each of its projects and the Contractor, appointed by the Client in terms of Regulation 5(1)(k), is required to prepare an Occupational Health and Safety Plan. This plan has to be prepared in terms of Regulation 7(1)(a) as well as the Client's Occupational Health & Safety Specification. In terms of Regulation 5(1)(l), the Client and the Contractor are required to agree on the Occupational Health and Safety Plan before any work may commence.

5.02 Framework for an Occupational Health and Safety Plan

5.02.1 Introduction

The Contractor must demonstrate to the Client that he has a suitable and sufficiently documented Occupational Health and Safety Plan as well as the necessary competencies, experience and resources to perform the construction work safely. The Contractor is required to submit, the following documentation for perusal and verification by the Client:

- Management Structure including an organogram – Tender Stage
- Quality Plan – Tender Stage
- Human Resources Plan – Tender Stage
- Registered Workplace Skills Plan
- "Letter of good standing" from the Compensation
- Commissioner or licensed compensation insurer – Tender Stage

- Proof of induction and other training of employees
- Example copies of minutes of previous Occupational Health and Safety Committee meetings and
- copies of Incident Investigation Reports.

5.02.2 Contents of an Occupational Health and Safety Plan

The Occupational Health and Safety Plan shall include the following:

5.02.2.1 Occupational Health and Safety Management Programme

- Management of Occupational Health and Safety risks
- Occupational Health and Safety structures and appointments
- Programme of Occupational Health and Safety inspections
- Occupational Health and Safety Representatives
- Occupational Health and Safety committee

5.02.2.2 Statement Regarding the Communication and Management of the Work

- Management structure and responsibilities
- Occupational Health and Safety objectives for the project and arrangements for monitoring and review of Occupational Health and Safety performance
- Arrangements for regular liaison between parties on site
- Consultation with the workforce
- The exchange of design information between the Client, Engineer, supervisors and subcontractors on site
- Handling design changes during the project
- Selection and control of subcontractors
- The exchange of Occupational Health and Safety information between all subcontractors
- Security
- Site induction and on site training
- Facilities and first-aid
- The reporting and investigation of accidents and incidents
- The production and approval of risk assessments and method statements
- Site Occupational Health and Safety rules
- Fire and emergency procedures
- Reporting to the Client i.e. results of Occupational Health and Safety inspections.
- Incident investigations and committee meetings
- Reporting of incidents to the Department of Labour and Compensation Commissioner where appropriate

6: APPOINTMENT OF SAFETY PERSONNEL

6.01 Construction Supervisor

In terms of Section 16 of the Act, the Chief Executive officer of the Contractor may delegate, in writing, part or all of his powers to a suitable person on the site.

The Contractor shall appoint a full-time Construction Supervisor, in writing, in terms of Regulation 8(1) of the Regulations with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where, justified by the scope and complexity of the works.

6.02 Construction safety officer

In terms of clause 8 of the Regulations the Contractor shall appoint in writing a full-time or part-time Construction Safety Officer. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision will be made in the Bill of Quantities to cover the cost of a dedicated construction safety officer appointed after award of the contract.

6.03 Health and safety Representatives

In terms of Sections 17 and 18 of the Act (OHSA 1993) the Contractor shall appoint, in writing, a health and safety Representative whenever he has more than 20 employees in his employ on the works. The health and safety Representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety Representatives for a workplace shall be at least one for every 50 employees.

The function of the health and safety Representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

6.04 Health and safety committee

In terms of Sections 17, 18 and 19 of the Act (OHSA 1993) the Contractor (as employer), shall establish one or more health and safety committee(s) where there are two or more health and safety Representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor's Representative and any Department of Labour inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of meetings, recommendations and reports made by the committee.

6.05 Competent persons

In accordance with the Construction Regulations the Contractor shall appoint, in writing, competent persons responsible for supervising construction work for the following work situations that may be expected on the site of the works, as applicable to the project.

Risk assessment for construction work (Regulation 9);
Fall protection (Regulation 10);
Structures (Regulation 11);
Temporary works (Regulation 10);
Excavation (Regulation 13);
Demolition work (Regulation 14);
Tunneling (Regulation 15);
Scaffolding (Regulation 16);
Suspended platform operations (Regulation 17);
Rope access work (Regulation 18);
Material Hoists (Regulation 19);
Bulk mixing plants (Regulation 20);
Explosive actuated fastening devices (Regulation 19);
Cranes (Regulation 22);
Construction vehicle and mobile plant (Regulation 23);
Electrical installation and machinery on construction site (Regulation 24);
Use and temporary storage of flammable liquids on construction site (Regulation 25);
Water environments (Regulation 26);
Housekeeping and general safeguarding on construction sites (Regulation 27);
Stacking and storage on construction sites (Regulation 28);

Fire precautions on construction sites (Regulation 29); and
Construction employee's facilities (Regulation 30).

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities to comply with all requirements of the Construction Regulations.

7: PROJECT / SITE SPECIFIC REQUIREMENTS

A list of activities and considerations that have been identified for the project and the construction site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor is given in Annexure D. This list is not to be considered as inclusive and other items must be added as required

In addition, the following health risks should be taken into account. It may become necessary to include others according to the requirements of the project.

Health risks

- Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Protection from wet and cold conditions
- Exposure to hazardous substances and chemicals used on site.

Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following key elements:

- List of key competent personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the specific types of emergencies;
- Information on hazardous material/situations.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, bomb threats, major incidents/accidents, etc. The Principal Contractor shall advise the Client, Agent, Engineer and all relevant authorities forthwith, of any emergencies, together with a record of action taken. This shall be confirmed in writing as soon as possible after the incident. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available to site personnel. These procedures shall form part of the Health and Safety Plan.

First Aid Boxes and First Aid Equipment

The Principal Contractor and all Contractors shall appoint in writing First Aider(s). If not already accredited, the appointed First Aider(s) are to be sent for accredited first aid training. Valid certificates are to be kept on site. The Principal Contractor shall provide an on-site First Aid Station with first aid facilities, including first aid boxes containing, at least, the requirements of the Annexure to Section 3 of the General Safety Regulations. All Contractors with more than five (5) employees shall supply their own first aid box. Contractors with more than ten (10) employees shall have a trained and certified First Aider on site at all times.

Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all workers are issued with and shall wear hard hats, protective footwear and overalls as well as any other necessary PPE as set out in Section 2.3 of the General Safety Regulations. Contractors are encouraged to provide reflective vests for all their staff. The Principal Contractor and all Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. This shall include necessary safety gear for visitors. The Principal Contractor shall clearly outline procedures to be taken when PPE or Clothing is:

Lost or stolen;
Worn out or damaged.
Issued to temporary labour or staff.

The above procedure applies to Contractors and their Sub-contractors, as they are all Employers in their own right.

Occupational Health and Safety Signage

The Contractor shall provide adequate on-site OHS signage. This should include but is not limited to: 'no unauthorised entry', 'report to site office', 'site office', 'beware of overhead work', 'hard hat area'. Signage shall be posted up at all entrances to site as well as on site in strategic locations e.g. access routes, stairways, entrances to structures and buildings, scaffolding, and other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations as amended.

8: HEALTH AND SAFETY FILE

The Principal Contractor shall in terms of Construction Regulation 7(1)(b) maintain a Health and Safety File on site at all times. The Health and Safety File is a file or other permanent record containing information on aspects of the construction project - which will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The Principal Contractor shall ensure that all other contractors open similar files in accordance with the Regulations.

The Principal Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract. The Health and Safety file shall include at least the following information:

- All Documents as required by the Act and Regulations
- All reports of inspections and audits
- All non-conformity reports
- All working drawings, calculations and design where applicable
- Detailed list of sub-contractors with contact details
- List of all hazardous materials used and stored on site with Data Sheets and Materials Hazard Data sheets
- All Hazard Identification and Risk Assessments carried out for the project
- All Health and Safety Plans for the project.
- All method statements
- Minutes of all relevant meetings
- Incident records, including investigations and results
- Record of all appointments under the Regulations

Annexure B is a list of the records to be kept on site.

The Health & Safety File shall be handed over to the Client on completion of the contract. It must contain all the documentation as set out above, or as instructed, as well as any handed to the Principal Contractor by any contractors together with a record of all drawings, designs, materials used and other similar information concerning the completed project.

9: RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Principal Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 9 of the Construction Regulations 2014).

Risk is a measure of the likelihood that the harm from a particular hazard will be realised, taking into account the possible severity of the harm. Harm to people includes death, injury (permanent or temporary), physical or mental health or any combination thereof. Risk management in health and safety includes the identification of hazards, assessing risks, taking action to eliminate or reduce the risk, monitoring the effectiveness and performing regular reviews of the entire process. The Principal Contractor shall compile method statements to address or handle the following:

Hazards particulars to the contract
Identify what could go wrong and how
Identify the likelihood of this happening
Identify the persons at risk
Identify the extent of possible harm
Eliminating or reducing this risk
A monitoring plan
A review plan

Contractors must ensure that all subcontractors conduct risk assessments for their scope of work as well. All risk assessments shall be updated and re-evaluated with any extra works or with any change to the scope of the works.

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

10: ARRANGEMENTS FOR MONITORING AND REVIEW

The Client and/or Agent will conduct a Monthly, or at greater frequency, Audit to audit compliance with Construction Regulation 5(1)(n) and (o) to ensure that the Contractor has implemented and is maintaining the agreed and approved OH&S Plan. Annexure C will be used as format when conducting the audit.

The Client reserves the right to conduct other ad hoc audits and inspections as deemed necessary.

A representative of the Contractor must accompany the Client on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

11: MEASUREMENT AND PAYMENT

The Contractor shall ensure that the sum of the amounts of the four items shall not be less than 1% of the Work Value of the Tender (Total: Schedule A).

Item
Unit

C11.01	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations.....	lump
	sum	

The full amount will be paid in one instalment only once:-

- (a) The Contractor has notified the Provincial Director of the Department of Labour in writing of the project.
- (b) The Contractor has made the required initial Appointments of Employees and Sub-Contractors.
- (c) The Client has approved the Contractor's Health and Safety Plan.
- (d) The Contractor has set up his Health and Safety File.

Item
Unit

C11.02 Contractor's time-related obligations in respect of the Occupational Health and Safety Act and Construction

Regulations.....month

The tendered rate shall represent full compensation for that part of the Contractors general obligations in terms of the Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. The sum will be paid per month only after payment for item C11.01 has been made. This item shall also cover all updates of the files, plans and reports associated with the Occupational Health and Safety Act and the Construction Regulations.

Item
Unit

C11.03 Provision of full time Construction Safety Officer

.....month

The tendered sum shall include for the cost of a construction safety officer on a full time basis, his overheads, transport and all others items necessary for the proper carrying out of his duties. If a part time safety officer is appointed then the amount tendered will be prorated according to the amount of time spent on the project.

Item
Unit

C11.04 Submission of the Health and Safety Filelump sum

This amount will be paid only once the Contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction. This must be done prior to the issue of a Certificate of Completion.

RECORDS TO BE KEPT ON SITE

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
1.	4(1)	Notification to Provincial Director – Annexure A Available on site	Contractor
2.	4(1)(m)	Copy of Principal Contractor's Health & Safety Plan Available on request	Client (Contractor)
3.	7(1)(d)	Copy of Principal Contractor's Health & Safety Plan As well as each Contractor's Health & Safety Plan Available on request	Principal Contractor
4.	7(2)(b)	Health & Safety File opened and kept on site (including all documentation-required i.t.o. OHSA & Regulations Available on request	Contractor
5.	7(1)(e)	Consolidated Health & Safety File handed to Client on completion of Construction work.	Contractor

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
		To include all documentation required i.t.o. OHSA & Regulations and records of all drawings, designs, materials used and similar information on the structure.	
6.	7(1)(f)	Comprehensive and Updated List of all Contractors on site, the agreements between the parties and the work being done Included in Health & Safety file and available on request	Contractor
7.	8(5)	Keep record on the Health & safety File of the input by Construction Safety Officer [CR 6(6)] at design stage or on the Health & Safety Plan	Contractor
8.	9(6)	Risk Assessment Available on site for inspection	Contractor
9.	7(7)	Proof of Health & Safety Induction Training	Every Employee on site
10.	10(3)	Construction Manager [CR 8(1)] has latest updated version of Fall Protection Plan [CR 10(1)]	Contractor
11.	9(2)(b)	Inform Contractor in writing of dangers and hazards relating to construction work	Designer of Structure
12.	11(1)(c)	All drawings pertaining to the design of structure On site available for inspection	Contractor
13.	11(2)(a) and (b)	Record of inspection of the structure [First 2 years – once every six (6) months, thereafter yearly]	Owner of Structure
14.	11(2)(c) and (d)	Maintenance records – safety of structure Available on request	Owner of Structure
15.	12(3)(c)	Drawings pertaining to the design of formwork/support work structure Kept on site, available on request	Contractor
16.	13(2)(h)	Record of excavation inspection On site available on request	Contractor
17.	17(11)	Suspended Platform inspection and performance test records Kept on site available on request	Contractor
18.	19(8)(c)	Material Hoist daily inspection entered and signed in record book kept on the premises	Contractor
19.	19(8)(d)	Maintenance records for Material Hoist Available on site	Contractor
20.	18(9)	Records of Batch Plant maintenance and repairs On site available for inspection	Contractor
21.	19(2)(g)(ii)	Issuing and collection of cartridges and nails or studs (Explosive Powered Tools) recorded in register – recipient signed for receipt as well as return	Contractor
22.	21(1)(d)	Findings of daily inspections (prior to use) of Construction Vehicles and Mobile Plant	Contractor
23.	22(d)	Record of temporary electrical installation inspections [once a week] and electrical machinery [daily before use] in a register and kept on site	Contractor
24.		Copies of all appointments made in regard to safety supervisors and inspectors	Contractor

HAZARDOUS TASK IDENTIFICATION

(The list given is not inclusive and other hazardous tasks may be identified as the construction progresses)

MAIN TASK	SUB TASK
ACCOMMODATION OF TRAFFIC	Clashes between Airport Fire and Safety traffic and construction work
	Dust (from jet blast)
	Traffic speed
	Provision of safety equipment
	Working next to air traffic (noise and jet blast)
	Erection of signage and barricades
EXCAVATING	By manual labour
	By excavating equipment e.g. Milling Machine
	Excavating duct slots by electrical/pneumatic breakers
ELECTRICAL	Working with generators and lighting
	Temporary installations
	Dealing with services provided by others
FIRE	Use and placement of fire extinguishers
	Fire fighting
	Gas Screed heaters
	Hand held gas burners
	Notification of Fire & Safety
MISCELLANEOUS	Site Establishment
	Housekeeping
	General storage
	Movement of equipment
	Use of personal transport
WORKSHOPS	Use of small electrical tools
	Gas and Flame Cutting
	Welding
	Use of general workshop equipment
	Tyre repair
	Use of jacking and lifting apparatus
HAZADOUS MATERIALS	Petrol
To be added to as required	Diesel

Materials safety date sheets as required	Lubricants
	Cement and cement bags
	Road lime and lime bags
	Flammable materials
	Gas bottles
ANY OTHER DANGEROUS ACTIVITIES IDENTIFIED BY THE CONTRACTOR	
To be added by the Contractor at tender stage	a)
	b)

Annex B: ACSA Construction Environment Management Plan – EMS 050

1. Background

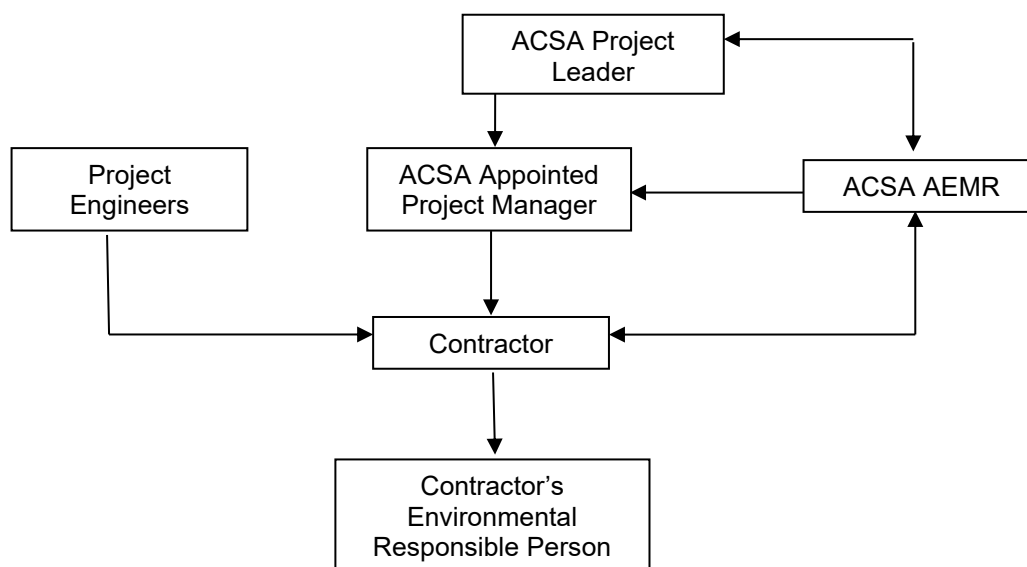
The purpose of this Environmental Management Plan (EMP) is to co-ordinate mitigation, rehabilitation, and monitoring measures of construction projects at ACSA airports such that environmental pollution and risks are minimized as far as possible.

This EMP is provided to contractors at the tender stage to ensure all costs associated with this EMP can be appropriately costed.

2. Organisational Structure

It is essential that an organisational structure is established early in the construction phase of the project and that all parties concerned accept the structure. This identifies the responsibilities and the authority of the ACSA Project Leader, design team, Project Manager (PM), consulting engineers and the numerous contractors and sub-contractors.

Responsibility for the application of the construction phase EMP for the project starts with ACSA's Project Leader. The ACSA Project Leader will devolve this responsibility to the designated and appointed Project Manager to assume this task within his or her portfolio, who will in turn issue conformance instructions to the Contractor(s). The Contractor(s) will appoint an Environmental Responsible Person who will ensure that the requirements of the EMP are implemented by monitoring and auditing the performance of the Contractor. ACSA's AEMR (Airport Environmental Management Representative) shall play an oversight role and report on overall EMP compliance to the ACSA Project Leader.



2.1 ACSA Project Leader

This is an ACSA employee ultimately responsible for the overall success of a project. This person could be within the Commercial, Maintenance & Engineering, Projects or Airport Planning Department.

2.2 Project Manager (PM)

The PM is responsible for ensuring that on-site activities are undertaken in accordance with the requirements of the EMP. The PM will thus need to ensure that:

- This EMP is included in the contracted agreements issued to the contractor(s)
- Environmental Method statements requested by ACSA's AEMR are provided prior to construction

- Corrective action is implemented as required
- Appropriate records and information regarding compliance with the EMP requirements are maintained and made available to the AEMR
- Instructions as required by the AEMR are issued to the relevant contractor

2.3 Contractor

- The Contractor shall ensure that all employees, sub-contractors, suppliers, etc. are fully aware of and comply with the environmental issues and requirements detailed in this EMP
- The Contractor shall liaise closely with their Environmental Responsible Person and PM and will ensure that works on site are conducted in accordance with this EMP
- The Contractor is to have a copy of the EMP on site and be familiar with its contents
- The Contractor must ensure that all employees (permanent and temporary) and all sub-contractors that work on the site for longer than two days, receive Environmental Awareness Training prior to commencing work on site
- The Contractor shall appoint an Environmental Responsible Person in writing, and will forward this appointment to ACSA's AEMR
- Prior to construction commencement, the Contractor shall draft and submit written environmental method statements to ACSA's AEMR for approval, covering those activities which are identified (in this document and/or by the AEMR), as being potentially harmful to the environment

Environmental Method Statements indicate how compliance shall be achieved and environmental risk will be mitigated. The environmental method statement shall state clearly:

- Timing of activities
- Materials to be used
- Equipment and staffing requirements
- The proposed construction procedure designed to implement the relevant environmental specifications
- The system to be implemented to ensure compliance with the above; and
- Other information deemed necessary by the AEMR and Environmental Responsible Person.

Method statements shall be submitted at least five working days prior to expected commencement of work on an activity, to allow the AEMR time to study and approve the method statement. The contractor shall not commence work on that activity until such time as the method statement has been approved in writing by the AEMR.

Due to changing circumstances, it may be necessary to modify method statements. In such cases, the proposed modifications must be indicated and agreed upon in writing between the AEMR and Environmental Responsible Person. The AEMR and Environmental Responsible Person must retain records of any amendments and ensure that the most current version of any method statement is being used.

2.4 Contractor's Environmental Responsible Person

The Contractor shall appoint / designate an environmental responsible person to liaise with ACSA's AEMR and ensure that the requirements set out in this EMP are implemented. The Environmental Responsible Person shall:

- Develop a system to ensure that the EMP and Environmental Method Statements are effectively implemented;
- Audit this system so that he/she can demonstrate to the AEMR that the EMP and Environmental Method Statements are being effectively implemented;
- Ensure that Contractors staff, sub-contractors, suppliers etc. are aware of their requirements in terms of the EMP and that they adhere to the EMP.
- Ensure that responsible persons for sub-contractors or sub-contractors are designated to carry out the requirements of the EMP and Environmental Method Statements;
- Have sufficient authority to issue site instructions to the Contractors staff on their site.

- Ensure that the Contractor and his Subcontractors and his employees have received the appropriate environmental awareness training before commencing on site.
- Meet with the Contractor to discuss the implementation of and non-conformances with this document.
- Identify appropriate corrective action if non-compliance occurs or unforeseen environmental issues arise that require environmental management action.
- Keep a register of major incidents (spills, injuries, complaints, legal transgressions, etc.) and other documentation related to the EMP.
- Issue stop orders when required.
- Report to ACSA's AEMR any problems (or complaints) related to conformance with this document which cannot first be resolved in co-operation with the Contractor and/or his Subcontractors.
- Assist in finding environmentally acceptable solutions to construction problems.

2.5 ACSA's AEMR shall:

- Request, review and approve environmental method statements from the Contractor.
- Undertake regular inspections (at least monthly, and more frequently at the AEMR's discretion) of the site in order to check for compliance with method statements as well as specifications outlined in this EMP.
- Provide an audit report to the ACSA Project Leader.

3. Environmental Specifications

3.1 Location of camp and depot

- The Contractor's Camp and Materials Storage Area shall be located at a position approved by the AEMR. No site staff other than security personnel shall be housed on site.
- The Contractor shall provide water and/or washing facilities at the Contractor's Camp for personnel.
- The Contractor's Camp and Materials Storage Area shall be kept neat and tidy and free of litter.

3.2 Demarcation of the site & access

It is important that activities are conducted within a limited area to facilitate control and to minimise the impact on the existing natural environment, existing tenants, and other construction activities in the vicinity and public thoroughfares.

The Contractor shall demarcate the boundaries of the site in order to restrict his construction activities to the site. The Contractor shall ensure that all his plant, labour and materials remain within the boundaries of the site. Failure to do so may result in the Contractor being required to fence the boundaries of the site at his own expense to the satisfaction of the AEMR.

Security and access to the site must be controlled at all times.

3.3 Traffic control & safety

Traffic control and safety shall be done in accordance with the South African Traffic Safety Manual, with the relevant signs, flagmen, barriers, etc. being provided at the various access points. Traffic control shall be done in co-operation with local traffic officials. All laws and regulations applicable on the public road system are enforceable on the construction site. Due to the activities involved in the construction phase, trucks and other related vehicles will be using the roads leading to the site. These vehicles will need to be roadworthy and abide by the speed limits. The Environmental Management Plan for the construction phase should monitor the impact on current traffic by additional construction vehicles to ensure noise, safety and dust issues are kept to a minimum.

3.4 Ablution facilities

The Contractor shall provide the necessary ablution facilities for all his personnel.

Chemical toilets shall be provided, with a minimum of one toilet per 15 persons. Toilets shall be easily accessible and shall be transportable. The toilets shall be secured to prevent them from blowing over,

and shall be provided with an external closing mechanism to prevent toilet paper from being blown out. Toilet paper dispensers shall be provided in all toilets. Toilets shall be cleaned and serviced regularly by a reputable toilet servicing company. Toilets shall be emptied before long weekends and builders' holidays.

The Contractor shall ensure that chemicals and/or waste from toilet cleaning operations are not spilled on the ground at any time. Should there be repeated spillage of chemicals and/or waste (i.e. more than three incidents), the Contractor shall be required to place the toilets on a solid base with a sump at his own expense. Accumulations of chemicals and waste will have to be removed from the site and disposed at an approved waste disposal site or sewage plant.

Abluting anywhere other than in the toilets shall not be permitted. Repeated use of the veld or other areas for ablation purposes (i.e. more than three incidents) may result in the guilty party being given a spot fine. The Contractor shall also be responsible for cleaning up any waste deposited by his personnel.

3.5 Domestic waste water

Wastewater from any other ablation or kitchen facilities on site shall be discharged into a suitable conservancy tank. The Contractor shall be responsible for ensuring that the system continues to operate effectively throughout the project and that the conservancy tank is emptied as required during the project. The Contractor shall employ a suitable qualified sub-contractor or the local authority to empty the conservancy tank.

3.6 Environmental training

According to the National Environmental Management Act (107 of 1998), any costs incurred to remedy environmental damage shall be borne by the person responsible for that damage; it is therefore critical that the contractors read and understand the requirements of this document and any succeeding documents pertaining to environmental requirements before construction commences. It is a requirement of the act that everyone takes reasonable measures to ensure that they do not pollute the environment. Reasonable measures include informing and educating employees about the environmental risks of their work and training them to operate in an environmentally acceptable manner.

Training is fundamental to the successful implementation of the EMP. All personnel whose work may result in an impact on the environment must receive appropriate training in the environmental procedures to be followed. In this regard, the following must be fulfilled:

- All personnel working on the construction site must attend an environmental awareness training workshop conducted by the Environmental Responsible Person prior to commencing work on site. The purpose of the workshop is to provide staff with the information they require to enable them to meet the requirements of the EMP. The Environmental Responsible Person may call upon the services of a specialist environmental education translator should this be required. Contractors, sub-contractors and all their staff must attend.
- The Environmental Responsible Person shall keep a register of all personnel attending the environmental awareness training workshops; attendance records must be filed and available on site.
- All staff must be trained in emergency response procedures; attendance records must be filed and available on site.
- Environmental awareness posters are to be displayed on site. Environmental 'do's and don'ts' must be clearly illustrated. The posters shall use pictures to convey the intended message and any explanatory text will be in English and the local dialect.

3.7 Solid waste management

- Solid waste includes construction debris (e.g. packaging materials, timber, cans etc.) waste and surplus food, food packaging etc.
- The Contractor shall institute an on-site waste management system that is acceptable to the AEMR in order to prevent the spread of refuse within and beyond the site. The Contractor is reminded that wind velocities on the construction site can be extremely high.
- All waste shall be collected and contained immediately. The Contractor shall institute a weekly clean-up of the site. This daily/weekly clean up shall be for the Contractor's account.

- The Contractor shall not dispose of any waste and/or construction debris by burning or burying. The use of waste bins and skips is essential. The bins shall be provided with lids and an external closing mechanism to prevent their contents from blowing out. The Contractor shall ensure that all waste is deposited by his employees in the waste bins for removal by the Contractor. Bins shall not be used for any purposes other than waste collection and shall be emptied on a regular basis. All waste shall be disposed of off-site at approved landfill sites.

Waste generated at the construction camps shall be separated into recyclable and non-recyclable waste, and shall be separated as follows:

- Hazardous waste (including used oil, diesel, petrol tins, paint, bitumen, etc.);
- Recyclable waste (paper, tins, glass);
- General waste; and
- Reusable construction material

Recyclable waste shall be deposited in separate skips/bins and removed off site for recycling. The Contractor may wish to enter into an agreement with the surrounding communities and/or his staff with regard to the collection and sale of recyclable and reusable materials.

Hazardous waste, including waste oil and other chemicals (e.g. paints, solvents) shall be stored in (an) enclosed area(s), and shall be clearly marked. If deemed necessary by the Environmental Responsible Person, the Contractor shall obtain the advice of a specialist waste expert concerning the storage of hazardous waste. Such waste shall be disposed of off-site by a specialist waste contractor, at a licensed hazardous waste disposal site. The Contractor shall keep documentary proof of the safe disposal of all waste, which will be available for audit at all times and will also include the waste type and volume.

The Contractor is advised that spot fines for littering have been included in this document. Offenders found littering will be liable for the spot fine.

3.8 Protection of fauna and flora

All fauna and flora (unless alien) within and around the site shall be protected. Birds and animals shall not be caught or killed by any means, including poisoning, trapping, shooting or setting of snares.

3.9 Protection of archaeological and palaeontological sites

If any possible palaeontological/archaeological material is found during excavations, the Contractor shall stop work immediately and inform the AEMR. The AEMR will inform the South African Heritage Resource Agency (SAHRA) and arrange for a palaeontologist/archaeologist to inspect, and if necessary excavate, the material, subject to acquiring the requisite permits.

3.10 Water pollution prevention & management

The Contractor shall prevent pollution of surface or underground water and shall comply with the Water Act, 36 of 1998, and any other national, provincial and local legislation regarding the prevention of water pollution, including the pollution of groundwater and any wetland on site.

The Contractor must ensure that all reasonable precautions are taken to prevent the pollution of the ground and water resources as a result of site activities. Ground contamination may hinder or prevent the re-establishment of natural vegetation. The Contractor shall keep the necessary materials and equipment on site to deal with ground spills of any of the materials used or stored on site.

The Contractor shall ensure that no oil, petrol, diesel, etc. is discharged onto the ground. Pumps and other machinery requiring oil, diesel, etc. that is to remain in one position for longer than two days shall be placed on drip trays. The drip trays shall be emptied regularly and the contaminated water disposed of off-site at a facility capable of handling such wastewater. Drip trays shall be cleaned before any possible rain events that may result in the drip trays overflowing, and before long week-ends and holidays.

Stormwater and/or groundwater may accumulate on site during the construction period and there is the potential for this water to be contaminated as a result of construction procedures. The Contractor shall

ensure that this water does not become contaminated. Contaminated water (eg. cement washings, waste water from ablution or kitchen facilities etc.) shall be collected in a conservancy tank, removed from the site and disposed of in a manner approved by the AEMR.

3.11 Stormwater control

Contractors shall take reasonable measures to prevent erosion resulting from a diversion, restriction or increase in the flow of stormwater caused by the presence of their works, operations and activities. Any stormwater collected in bunded areas containing oils, fuels, chemicals or other potentially polluting substances shall be pumped out of the bund, collected in a suitable container and removed from the site for appropriate disposal.

Contractors shall provide adequate control measures to prevent stormwater damage and erosion during construction. Control measures should include the control by sumps and adequate pumping of water ingress into trenches below the water table. Stormwater should also be directed into attenuation ponds wherever possible. All methods of stormwater control during the construction phase are to be agreed and approved by the AEMR.

Berms and existing stormwater drainage systems shall be used to prevent surface run-off from entering site excavations.

3.12 Water resource management

Water is a scarce resource and shall be conserved wherever possible. The Contractor shall not waste water (e.g. water areas excessively etc.). All leaking water pipes are to be repaired or replaced immediately. The Contractor shall provide all drinking water and water for construction purposes. Water shall not be used unnecessarily.

3.13 Pollution prevention and remediation

The Contractor must ensure that all reasonable precautions are taken to prevent the pollution of the ground and water resources as a result of site activities. Pollution could result from the release, accidental or otherwise, of contaminated runoff from construction camps, discharge of contaminated construction water, chemicals, oils, fuels, sewage, run off from stockpiles, solid waste, litter, etc.

The first activity to be undertaken once a spill occurs is to terminate the source of the spill and contain the polluted area.

All fuel, oil or hydraulic fluid spills are to be reported to the Project Manager/ Engineer, Environmental Responsible Person and AEMR so that appropriate clean-up measures can be implemented.

The Contractor shall keep the necessary materials and equipment on site to deal with ground spills of any of the materials used or stored on site. Sufficient quantities of suitable hydrocarbon absorbent or remediation materials must be present on site at all times. Absorbent "spill-mop-up" products need to be on hand – Enretech, Spillsorb or Drizit type products should be investigated for these purposes.

Concrete-mixing equipment (mixers and the like) shall not be discharged overland. Such water shall be collected in a conservancy tank, removed from the site and disposed of in the correct manner. The Contractor may consider reusing such water for washing other concrete equipment to minimise the amount required to be removed off site.

The Contractor is advised that cement and concrete are regarded as highly hazardous to the natural environment on account of the very high pH of the material, and the chemicals contained therein. Therefore, the Contractor shall ensure that:

- concrete is mixed on mortar boards, and not directly on the ground;
- the visible remains of concrete, either solid, or from washings, are physically removed immediately and disposed of as waste. Washing the visible signs into the ground is not acceptable; and
- all aggregate is also removed.

Trucks delivering concrete shall not wash the trucks or the chutes on the site. All washing operations shall take place off site at a location where wastewater can be disposed of in the correct manner.

3.14 Servicing/fuelling of construction equipment

Servicing and fuelling should preferably occur off site.

However, if these activities occur on site, the Contractor shall ensure that all servicing of vehicles and equipment takes place in designated areas agreed upon by the AEMR. All waste shall be collected and disposed of off-site at an appropriately licensed landfill site. All equipment that leaks onto the ground shall be repaired immediately or removed.

Similarly, no vehicles or machines shall be refuelled on site except at designated refuelling locations, unless otherwise agreed with the AEMR. The Contractor shall not change oil or lubricants anywhere on site except at designated locations, except if there is a breakdown or an emergency repair. In such instances, the Contractor shall ensure that he has Drizit pads (or equivalent) and/or drip trays available to collect any oil, fluid, etc.

3.15 Fuels and Chemicals

The Contractor shall take all reasonable precautions to prevent the pollution of the ground and/or water resources by fuels and chemicals as a result of his activities.

The Contractor shall keep the necessary materials and equipment on site to deal with ground spills of any of the materials used or stored on site.

The Contractor shall ensure that no oil, petrol, diesel, etc. is discharged onto the ground. Pumps and other machinery requiring oil, diesel, etc. that is to remain in one position for longer than two days shall be placed on drip trays. The drip trays shall be emptied regularly and the contaminated water disposed of off-site at a facility capable of handling such wastewater. Drip trays shall be cleaned before any possible rain events that may result in the drip trays overflowing, and before long week-ends and holidays.

The Contractor shall remove all oil-, petrol-, and diesel-soaked sand immediately and shall dispose of it as hazardous waste.

Should the Environmental Responsible Person/AEMR and/or the relevant authorities deem it necessary to institute a programme for the removal of contaminated ground resulting from the non-compliance of the controls detailed above, these costs will be for the Contractor's account. Remedial action shall be approved by the AEMR and relevant authorities, if appropriate.

3.16 Fuel & Hazardous Materials Storage

Contractors shall identify fuels and hazardous substances to be stored on the site and shall ensure that they know the effects of these substances on their staff and the environment. The Environmental Responsible Person shall keep a copy of a fuels and hazardous substance inventory which shall be available on site.

Contractors shall ensure that the quantities of fuels and chemicals on site are appropriate to the requirements and are stored and handled so as to avoid the risk of spillage. All fuels, oils and chemicals shall be confined to a specific and secured area. These materials shall be stored in an area with a concrete or other impervious base, which is adequately bunded. The volume of the bund shall be two times the volume of the containers stored. Gas and fuel should not be stored in the same storage area, and any generators used on the site should also be placed on a bunded surface.

The Contractor shall be responsible for securing any permits / certificates that may be required in respect of fuel storage from the local authorities.

In addition, the following must be implemented:

- All fuel stores must be equipped with a fire extinguisher;

- Materials Safety Data Sheets must be available on site and filed accordingly.
- No vehicle servicing may take place on the site. Servicing of equipment that uses hydrocarbon fuels, oils, lubricants and other hazardous chemicals may only take place in the site camp under conditions approved by the AEMR;
- All fuels are to be stored within a lined / demarcated area in the Site Camp. No refuelling is to take place outside of this demarcated area unless authorised by the Environmental Responsible Person. Note that filling machinery in the field (on site) from canisters should be cleared with the Environmental Responsible Person and both a "no leak" funnel / pump and one of the above mentioned absorption products must be on hand in the event of such refuelling taking place.

3.17 Dust control

The Contractor shall be responsible for the continued control of dust arising from his operations, through measures including, but not limited to, spraying of water on bare areas, rotovating straw bales into the soil surface and the scheduling of dust-generating activities to times when wind velocity is low. Overhead sprayers shall not be used in windy conditions, because too much water will be lost to evaporation. The use of water carts is preferred.

3.18 Noise control

The Contractor shall take all reasonable precautions to minimise noise generated on site as a result of his operations, especially when working in areas or on activities that may impact on neighbouring land users.

The Contractor shall comply with the applicable regulations with regard to noise.

The Environmental Responsible Person and/or AEMR may inform adjacent land users, tenants and communities about the possibility of noise pollution and the approximate duration of the problem.

3.19 Emergency procedures

The Contractor shall ensure that emergency procedures are set up prior to commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents to employees, use of hazardous substances, etc. Emergency procedures, including responsible personnel, contact details of emergency services, etc. shall be made available to all the relevant personnel and shall be clearly demarcated at the relevant locations around the site.

The Environmental Responsible Person shall advise the Contractor, PM and AEMR of any emergencies on site, together with a record of action taken.

3.19.1 Fires

The Contractor shall take all the necessary precautions to ensure that fires are not started as a result of his activities on site, and shall also comply with the requirements of the Occupational Health and Safety Act 85 of 1993.

No open fires shall be permitted on or off site. Closed fires or stoves shall only be permitted at designated safe sites in the construction camps. Fires shall also not be permitted near any potential sources of combustion, such as fuel stores, stockpiles of plant material etc.

The Contractor is advised that sparks generated during welding, cutting of metal or gas cutting can cause fires. Every possible precaution shall therefore be taken when working with this equipment near potential sources of combustion. Such precautions include having an approved fire extinguisher immediately available at the site of any such activities.

The Contractor shall be liable for any expenses incurred by any organisations called to assist with fighting fires, and for any costs relating to the rehabilitation of burnt areas.

No smoking will be permitted on the site except for within a designated area in the site camp. Suitable firefighting equipment must be readily available in this area.

The Contractor must ensure that the contact details of the nearest Fire Department are displayed on site (together with other emergency services) and that all persons involved with the project know the location of these numbers on site.

4. Site clearance and rehabilitation

4.1 Removal of topsoil

Following removal of vegetation from the site, all topsoil shall be removed (up to a maximum of 30 cm depth) and stockpiled for re-use in subsequent rehabilitation and landscaping activities. The stockpiles shall not be higher than 2 m in order to minimise composting. The stockpiles of topsoil shall be located in an area agreed with the AEMR.

4.2 Stabilisation of steep slopes

The disturbance of steep slopes, for example by the removal of vegetation, may result in slope instability and erosion by rain and surface run off. The Contractor shall ensure that slopes that are disturbed during construction are stabilised to prevent erosion occurring. Any erosion that does occur must be reinstated at the Contractor's cost.

4.3 Rehabilitation

The Contractor shall be responsible for rehabilitating any areas cleared or disturbed for construction purposes that are to be incorporated into open space or buffer zones, as well as all spoiling. The Contractor shall revegetate such areas in accordance with the specification provided below.

The Contractor shall stabilise, by straw rotovation or other, any areas that are cleared or disturbed for construction purposes which are not going to be incorporated into open space or buffer zones (i.e. areas that will be subsequently developed by another party).

All construction equipment and excess aggregate, gravel, stone, concrete, bricks, temporary fencing and the like shall be removed from the site upon completion of the work. No discarded materials of whatsoever nature shall be buried on the site or on any other land not owned by ACSA.

4.4 Landscaping and preparation for re-vegetation

Areas that require reshaping shall be cut, filled and compacted so as to follow the contours of the surrounding landscape. Topsoil removed from the area initially shall be replaced. Care must be taken not to mix the topsoil with the subsoil during shaping operations. Should a crust form on the soil before revegetation is commenced, the Contractor shall, at his own cost, loosen the crust by scarifying to a depth of 150 mm.

5. Management and monitoring

This section focuses on the systems and procedures required to ensure that the environmental specifications are effectively implemented. Emphasis is on monitoring and penalties, aimed at ensuring compliance with this document.

5.1 General inspection monitoring and reporting

The Environmental Responsible Person shall:

- Inspect the site on a daily basis to ensure that the environmental specifications are adhered to.
- Maintain a record of major incidents (spills, impacts, complaints, legal transgressions etc.) as well as corrective and preventive actions taken.
- Conduct regular internal audits (at least weekly) to ensure that the system for implementation of the EMP is operating effectively and keep records of these audits.
- Conduct monthly meetings for the duration of the project. These will be attended by the Environmental Responsible Person, Contractors Resident Engineers and sub-contractor representatives, and will be

minuted and available for audit. The agenda will cover compliance with the EMP and environmental method statements, results of audits, non-compliances and corrective and preventative actions with agreed dates, and environmental queries.

5.2 Penalties

Penalties may be imposed by the AEMR on Contractors who are found to be infringing these specifications. The Contractor shall be advised in writing of the nature of the infringement and the amount of the penalty. The Contractor shall determine how to recover the fine from the relevant employee and/or sub-contractor. The Contractor shall also take the necessary steps (e.g. training) to prevent a recurrence of the infringement and shall advise the AEMR accordingly.

The Contractor is also advised that the imposition of penalties does not replace any legal proceedings the Council, authorities, land owners and/or members of the public may institute against the Contractor.

Penalties may range between R200.00 and R20, 000.00, depending upon the severity of the infringement. The decision on how much to impose will be made by the AEMR and will be final. In addition to the penalty, the Contractor shall be required to make good any damage caused as a result of the infringement at his own expense.

A preliminary list of infringements for which penalties will be imposed is as follows:

- Moving outside the demarcated site boundaries;
- Littering of the site and surrounds;
- Burying waste on site and surrounds;
- Smoking in the vicinity of fuel storage and filling areas and in any other areas where flammable materials are stored/used;
- Making fires outside designated areas;
- Defacement of natural features;
- Spillage onto the ground of oil, diesel, etc.;
- Picking/damaging plant material;
- Damaging/killing wild animals; and
- Additional fines as determined by the AEMR and added to this list.

The AEMR may also order the Contractor via the ACSA Project Leader to suspend part or all the works if the Contractor repeatedly causes damage to the environment by not adhering to the EMP. The suspension will be enforced until the offending actions, procedure or equipment is corrected. No extension of time will be granted for such delays and all costs will be borne by the Contractor.

Annex C: POPIA

CONFIDENTIALITY AND DATA PROTECTION

Save as provided in this clause (*Confidentiality and Data Protection*), each Party shall, and shall procure that its Affiliate and their respective officers, directors, employees, agents, auditors and advisors shall, treat as confidential all information relating to the other Party or its Affiliates thereof or relating to their respective businesses that is of a confidential nature and which is obtained by that Party in terms of, or arising from the implementation of this Agreement, which may become known to it by virtue of being a Party, and shall not reveal, disclose or authorise the disclosure of any such information to any third party or use such information for its own purpose or for any purposes other than those related to the implementation of this Agreement.

The obligations of confidentiality in this clause shall not apply in respect of the disclosure or use of such information in the following circumstances:

in respect of any information which is previously known by such Party (other than as a result of any breach or default by any Party or other person of any agreement by which such Confidential Information was obtained by such Party);

in respect of any information which is in the public domain (other than as a result of any breach or default by either Party);

any disclosure to either Party's professional advisors, executive staff, board of directors or similar governing body who (i) such Party believes have a need to know such information, and (ii) are notified of the confidential nature of such information and are bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;

any disclosure required by law or by any court of competent jurisdiction or by any regulatory authority or by the rules or regulations of any stock exchange;

any disclosure made by a Party made in accordance with that Party's pursuit of any legal remedy;

any disclosure by a Party to its shareholders or members pursuant to any reporting obligations that Party may have to its shareholders or members, provided that each such shareholder or member is notified of the confidential nature of such information and is bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;

In the event that a Party is required to disclose confidential information as contemplated in this clause, such Party will:

advise any Party/ies in respect of whom such information relates (the "**Relevant Party/ies**") in writing prior to disclosure, if possible;

take such steps to limit the disclosure to the minimum extent required to satisfy such requirement and to the extent that it lawfully and reasonably can;

afford the Relevant Party/ies a reasonable opportunity, if possible, to intervene in the proceedings;

comply with the Relevant Party/ies' reasonable requests as to the manner and terms of such disclosure; and

notify the Relevant Party/ies of the recipient of, and the form and extent of, any such disclosure or announcement immediately after it was made.

Either Party may, by notice in writing, be entitled to demand the prompt return of the whole or any part of any confidential information supplied by it to the other Party, and each Party hereby undertakes to comply promptly with any such demand.

In line with the provisions of Protection of Personal Information Act, No 4 of 2013 (POPIA), particularly section 20 and 21, the service provider (referred to as Operator in POPIA) shall observe the following principles when processing personal information on behalf of the Company (referred to as Responsible Party in POPIA):

the Service Provider shall only act on the Company's documented instructions, unless required by law to act without such instructions;

the Service Provider shall ensure that its representatives processing the information are subject to a duty of confidence;

the Service Provider shall take appropriate measures to ensure the security of processing. The Service Provider shall ensure and hereby warrants that they have minimum IT and or physical security safeguard to protect personal information;

the Service Provider shall notify the Company immediately where there are reasonable grounds to believe that the personal information of a data subject has been accessed or acquired by any unauthorised person;

the Service Provider shall only engage a sub-operator with the Company's prior authorisation and under a written contract;

the Service Provider shall take appropriate measures to help the Company respond to requests from data subjects to exercise their rights;

taking into account the nature of processing and the information available, the Service Provider shall assist the Company in meeting its POPIA obligations in relation to the security of processing, the notification of personal information breaches and data protection impact assessments;

the Service Provider shall delete or return all personal information to the Company (at the Company's choice) at the end of the contract, and the service provider shall also delete existing personal information unless the law requires its storage; and

the Service Provider shall submit to audits and inspections. The Service Provider shall also give the Company whatever information it needs to ensure that the Parties meet their Section 20(1) obligations.