AIRPORTS COMPANY
SOUTH AFRICA

AIRPORTS COMPANY SOUTH AFRICA, CTIA

TENDER REFERENCE NO: CIA RFQ 71725

THE APPOINTMENT OF A CONSULTING ENGINEERING SERVICES FOR MANAGEMENT OF INSTALLATION OF PIT VALVES, FUEL DEPOT CHECK VALVES AND METERS REPLACEMENT AT AIRPORTS COMPANY SOUTH AFRICA CAPE TOWN INTERNATIONAL AIRPORT.

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Between **AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED**

Applicable at Cape Town International Airport

(Registration Number: 1993/004149/30)

and .....

(Registration Number: _____)

for **CONSULTING ENGINEERING SERVICES: FOR MANAGEMENT OF INSTALLATION OF PIT VALVES, FUEL DEPOT CHECK VALVES AND METERS REPLACEMENT AT AIRPORTS COMPANY SOUTH AFRICA CAPE TOWN INTERNATIONAL AIRPORT.**

CONSULTING ENGINEERING SERVICES: FOR MANAGEMENT OF INSTALLATION OF PIT VALVES, FUEL DEPOT CHECK VALVES AND METERS REPLACEMENT AT AIRPORTS COMPANY SOUTH AFRICA CAPE TOWN INTERNATIONAL AIRPORT.

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Part C1: Agreement and Contract Data

C1.1 Form of Offer and Acceptance

Offer

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

PROFESSIONAL SERVICES FOR FUEL PIT VALVES AND METERS REPLACEMENT

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

The tenderer, identified in the Offer signature block, has examined the contract as listed in the Acceptance section and agreed to provide this Offer.

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 **Consultant** 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.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

(In words) _____;

R _____ **including VAT** (in figures)

THE OFFERED PRICES ARE AS STATED IN THE PRICING SCHEDULE

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 **Consultant** in the *conditions of contract* identified in the Contract Data.

Signature(s)		
Name(s)		
Capacity		
For the tenderer:		
Name & signature of witness		Date

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

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 **Consultants** 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

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. 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 a copy of this document which contains the Employer's signature, including the Schedule of Deviations (if any). Unless the tenderer (now **Consultant)** 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	Airports Company South Africa (ACSA) SOC, Cape Town International Airport, Private Bag X9002, Cape Town, 7525	
Name & signature of witness		Date

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Schedule of Deviations

1 Subject . . . . . .

Details . . . . . .

. . . . . .

. . . . . .

2 Subject . . . . . .

Details . . . . . .

. . . . . .

. . . . . .

3 Subject . . . . . .

Details . . . . . .

. . . . . .

. . . . . .

4 Subject . . . . . .

Details . . . . . .

. . . . . .

. . . . . .

. . . . . .

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable 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 Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

	For the Employer	**For the Bidder**
Signature (s)		
Name (s)		
Capacity		
Name and Address	Airports Company South Africa (ACSA) SOC, Cape Town International Airport, Private Bag X9002, Cape Town, 7525	
Name & Signature of witness		

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Date .....

Part C1.2a Contract Data

The Conditions of contract are selected from the NEC3 Professional Services Contract, April 2013.

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

Part one - Data provided by the *Employer*

1 **General**

The *conditions of contract* are the core clauses and the clauses for Main Option:

P: Percentage Based Contract based on cost of works according to Government Gazette "Guidelines and Processes for Estimating Fees for persons in Terms of the Engineering Profession Act" dated 04 December 2014

Dispute resolution Option clause: W1

Secondary Options (incorporating amendments)

X2 Changes in the law

X7 Delay damages

X9 Transfer of rights

X10 Employer's *Agent*

X11 Termination by the Employer

X17 Low service damages

X18: Limitation of liability

X20 Key performance indicators

Z: *Additional conditions of contract*

of the NEC3 Professional Services Contract, April 2013.

The *project stages* are as per FIDPM framework:

Project stage		**Key deliverable at end of each stage as described in the Scope and accepted by the *Employer***
No	**Description**	
1	Inception	Not required
2	Concept and Viability	Preliminary Design and Concept Report
3	Detailed Design	Design Development Report
4	Documentation and Procurement	Completed Documentation and Procurement
5	Contract Administration and Inspection	Construction works capable of being used by the *Employer* as intended
6	Handover	Hand over the works and record information to the user Organisation and if necessary, train end user staff in the operation of the works
7	Close-out	Final approval Certificates signed by all parties and project documentation submitted to the *Employer*
	Additional Service	

10.1 The *Employer* is: Airports Company South Africa SOC, Cape Town International Airport

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Address:
Cape Town International Airport
Private Bag X9002
Cape Town
7525

Tel No: 021 937 1200

Fax No: 021 936 2937

11.2(9)	The *services* are: Professional Services for Fuel Pit valves and Flow Meters replacement
11.2(10)	The following matters will be included in the Risk Register • Availability of As Built information • Access to Site • Statutory approvals and ACSA approvals • Site Constraints and Constructability • Notification of Claims • Financial and Procurement
11.2(11)	The Scope is in the document called Part 3: Scope of Work
12.2	The *law of the contract* is the law of the Republic of South Africa
13.1	The *language of this contract* is English
13.3	The *period for reply* is 7 days
13.6	The *period for retention* is 1 year following Completion or earlier termination
2	**The Parties' main responsibilities**
25.2	The *Employer* provides access to the following persons, places and things

	access to	***access date***
1	All As-built Information & existing services	Upon award of the project(s)
2	Relevant Engineering, Operational and Maintenance Personnel of ACSA	Upon award of the project(s)

3	**Time**
31.2	The *starting date* is _____
11.2(3)	The *completion date* for the whole of the *services* is _____
11.2(6)	The *key date*s and the *condition*s to be met are:

	***Condition* to be met**	***key date***
1	Project initiation and strategic brief	_____
2	Concept design stage	_____
3	Detailed design stage	_____
4	Documentation and Procurement	_____
5	Contract Administration and Inspection	_____
6	Handover	_____
7	Project Close-out	

31.1	The *Consultant* is to submit a first programme for acceptance within 2 weeks of the Contract Date.
32.2	The *Consultant* submits revised programmes at intervals of 4 weeks.
4	**Quality**
40.2	The quality policy statement and quality plan are provided within 2 weeks of the Contract Date.
41.1	The *defects date* is 52 weeks after Completion of the whole of the *service*s.
5	**Payment**
50.1	The *assessment interval* ends and starts at 12h00 on the 25th day of each successive month.
51.1	The period within which payments are made is 4 weeks, after the receipt of the tax invoice.
51.2	The *currency of this contract* is the South African Rand (ZAR).
51.5	The *interest rate* is The prime lending rate (calculated on a 365 day year) charged by Nedbank of South Africa, from time to time, as certified, in the event of any dispute, by any manager of such bank, where appointment shall not be necessary to prove.
6	**Compensation events**
	No data required for this section of the *conditions of contract*.
7	**Rights to material**
	No data required for this section of the *conditions of contract*.
8	**Indemnity, insurance and liability**
	For additional insurance provisions - Refer to Part C4.2 - **Insurance Clauses for Capex Projects**
81.1	The amounts of insurance and the periods for which the *Consultant* maintains insurance are

Event	**Cover**	**Period following Completion of the whole of the services or earlier termination**
failure by the *Consultant* to use the skill and care normally used by professionals providing services similar to the *service*s	- Consultant to submit Insurance Certificate of Professional Indemnity Insurance Cover of R 5 million	Minimum 4 years
death of or bodily injury to a person (not an employee of the *Consultant*) or loss of or damage to property resulting from an action or failure to take action by the *Consultant*	Consultant to submit Insurance Certificate of Insurance for Public Liability Insurance Cover for R10 Million	Minimum 4 years
death of or bodily injury to employees of the *Consultant* arising out of and in the course of their employment in connection with this contract	As prescribed by the Compensation for Occupational Injuries and Diseases Act 130 of 1993	3 years

	The Employer takes out insurance in excess to the insurance cover taken by the Consultant and additional insurance cover, and the Consultant becomes liable for the deductibles in the event of an insurance claim made under the insurance of the Employer. In the event where the Consultant defaults in its insurance obligations, the Employer may take insurance on its own and then deduct the monthly premiums from the Consultant, and the Consultant further responsible for any deductibles in the event of an insurance claim.
82	**Limitation of liability**
82.1	The Consultant's total direct liability to the Employer for all matters arising under or in connection with this contract, other than excluded matters, is limited to 100% of the Total of the Prices and applies in contract, delict and otherwise to the extent allowed under the law of the contract. The excluded matters are obligations and amounts payable by the Consultant as stated in this contract for • Delay damages, • Consultant's share if Option C applies, • An infringement by the Consultant of the rights of Others, • Loss or damage to third party property, • Death of or bodily injury to a person other than an employee of the Consultant, and • Insurance obligations of the Consultant.
82.2	Subject to other provisions of this contract, the Consultant's liability to the Employer is limited to that proportion of Employer's losses for which the Consultant is responsible under this contract.
9	**Termination**
	Refer to Secondary Option Clause X11.
10	**Data for main Option clause**
	Refer to Z clause 1
21.3	The *Consultant* prepares forecasts of the total of the *expenses* at intervals of no longer than 4 weeks.
11	**Data for Option W1**
W1.1	The *Adjudicator* is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Adjudicators provided under the relevant Z clause
W1.2(3)	The *adjudicator nominating body* is the current Chairman of the Johannesburg Advocates' Bar Council.
W1.4(2)	The *tribunal* is Arbitration
W1.4(5)	The arbitration procedure is as set out in The Rules for The Conduct of Arbitrations 2013 Edition, 7th Edition Rules of The Association Of Arbitrators (Southern Africa). The place where arbitration is to be held is Cape Town, South Africa. The *Arbitrator* is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Arbitrators provided under the relevant Z clause if the *arbitration procedure* does not state who selects an arbitrator. The Arbitrator nominating body is the Chairman of the Johannesburg Bar Council.
12	**Data for Secondary Option clauses**
X7	**Delay Damages**
	Delay damages for each section of the work are 2.5% per week to the maximum of 10% of Total of the Prices at completion date.
X10	**The *Employer's Agent***
X10.1	The *Employer's Agent* is Name: Vuyolwethu Ncedana

Address:
Southern Office Block
Cape Town International Airport
Private Bag X9002
Cape Town
7525

The authority of the *Employer's Agent* is Project Manager.

X11	**Termination by Employer**
X11.1	The Employer may terminate the Consultant's obligation to Provide the services for a reason not stated in this contract by notifying the Consultant.
X18	**Limitation of liability**
X18.1	Neither Party is liability 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	The *Consultant's* liability to the *Employer* for Defects that are not found until after the *defects date* is limited to the Total of the Prices.
X18.3	The end of liability date is 3 years after Completion of the whole of the services.

Z1 **Estimation of fees**

It is specifically recorded that the fees charged by the consultant for services rendered in connection with and/or under this Contract shall be in terms of:

P: (Government Gazette "Guideline for Services and Processes for Estimating Fees for Persons in Terms of the Engineering Profession Act" latest edition dated December 2015)

Z2 **Tax invoices**

The *Consultant*'s invoice.

Delete the first sentence of core clause 50.2 and replace with:

Invoices submitted by the *Consultant* to the *Employer* include

- the details stated in the Scope to show how the amount due has been assessed, and
- the details required by the *Employer* for a valid tax invoice.

Delete the first sentence of core clause 51.1 and replace with:

Each payment is made by the *Employer* within four weeks of receiving the *Consultant*'s invoice showing the details which this contract requires or, if a different period is stated in the Contract Data, within the period stated.

Z3 **Communications and Notices**

Z3.1 Add to the end of the first sentence in core Clause 13.1:

All notices, notifications, requests, demands or other communications shall be deemed to have reached the other Party –

- if delivered by hand, on the date of delivery;
- if posted by ordinary mail or registered post, on the 5th (fifth) calendar day following the date of such posting;
- if transmitted by facsimile or any other electronic medium acceptable to both Parties, on the first Business Day following the date of transmission / publication / delivery.

Z4 **Appointment of the *Adjudicator***

An *Adjudicator* is appointed when a dispute arises from the Panel of Adjudicators below. In the event that no Adjudicator from the Panel of Adjudicators is based in the province where the Employer is located, Parties shall nominate an Adjudicator outside of the Panel of Adjudicators. The referring Party nominates an Adjudicator, which nomination is either accepted or rejected by the other Party. In the instance of a rejection of the nominated *Adjudicator,* the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an *Adjudicator* listed in the Panel of *Adjudicators* below or where in the province in which the Employer is located there is no Adjudicator that is part of the Panel of Adjudicators, the Chairman of the Johannesburg Bar Council will appoint an Adjudicator from the list of Adjudicators nominated by the Parties. An appointed Adjudicator will provide his written award no later than 30 days following the last day of closing arguments.

The Parties appoint the *Adjudicator* under the NEC3 Adjudicator's Contract, April 2013

PANEL OF ADJUDICATORS		
Name	Location	Contact details (phone & e mail)
Adv. Ghandi Badela	Gauteng	+27 11 282 3700 ghandi@badela.co.za
Mr. Errol Tate Pr. Eng.	Durban	+27 11 262 4001 Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800 salimebrahim@mweb.co.za
Mr. Sebe Msutwana Pr. Eng.	Gauteng	+27 11 442 8555 sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke SC	Gauteng	083 653 2281 reyneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

Z5 **Appointment of the *Arbitrator***

An *Arbitrator* is appointed when a dispute arises from the Panel of Arbitrators below. In the event that no Arbitrator from the Panel of Arbitrators is based in the province where the Employer is located, Parties shall nominate an Arbitrator outside of the Panel of Arbitrators. The referring party nominates an Arbitrator, which nomination is either accepted or rejected by the other party. In the instance of a rejection of the nominated *Arbitrator,* the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an *Arbitrator* listed in the Panel of *Arbitrators* below or where in the province in which the Employer is located there is no Arbitrator that is part of the Panel of Arbitrators, the Chairman of the Johannesburg Bar Council will appoint an Arbitrator from the list of Arbitrators nominated by the Parties. An appointed Arbitrator shall provide his written award no later than 30 days following the last day of closing arguments.

PANEL OF ARBITRATORS		
Name	Location	Contact details (phone & e mail)
Adv. Ghandi Badela	Gauteng	+27 11 282 3700 ghandi@badela.co.za
Mr. Errol Tate Pr. Eng.	Durban	+27 11 262 4001 Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800 salimebrahim@mweb.co.za
Mr. Sebe Msutwana Pr. Eng.	Gauteng	+27 11 442 8555 sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke SC	Gauteng	083 653 2281 reyneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

AMENDMENTS TO CORE CLAUSES

Z6 **Interpretation of the law**

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.

Z7 **Providing the Works: Delete core clause 20.1 and replace with the following:**

The *Consultant* will supervise the works in accordance with the Works Information and warrants that the results of the Works done in accordance with the drawings and specifications, when complete, shall be fit for their intended purpose.

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 *Consultant* 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 **Termination**

Z9.1 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”.

ADDITIONAL Z – CLAUSES

Z10 Cession, delegation and assignment

Z10.1 The *Consultant* 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.

Z10.2 The *Employer* maycede and/or delegate its rights and obligations under this contract to any person or entity and may notify the Consultant prior to such cession and/or delegation taking place.

Z11 Ethics

Z11.1 The *Consultant* undertakes:

not to give or cause 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; and

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.

Z11.2 The *Consultant*'s breach of this clause constitutes grounds for terminating the *Consultant*'s obligation to Provide the Works or taking any other action as appropriate against the *Consultant* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.

Z11.3 If the *Consultant* 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.

Z12 Confidentiality

Z12.1 All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the *Consultant* 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.

Z12.2 If the *Consultant* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.

Z12.2 This undertaking shall not apply to –

Information disclosed to the employees of the *Consultant* for the purposes of the implementation of this agreement. The *Consultant* 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;

Information which the *Consultant* is required by law to disclose, provided that the *Consultant* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect such information. The *Consultant* 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;

Information which at the time of disclosure or thereafter, without default on the part of the *Consultant*, enters the public domain or to information which was already in the possession of the *Consultant* at the time of disclosure (evidenced by written records in existence at that time);

Z12.3 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*.

Z12.4 The *Consultant* ensures that all his Sub-Consultants abide by the undertakings in this clause.

Z13 *Employer*'s Step-in rights

Z13.1 If the *Consultant* defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the *Project Manager*, the *Employer*, without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party

(including any sub-Consultant or supplier of the *Consultant*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Consultant*.

Z13.2 The *Consultant* co-operates with the *Employer,* facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Consultant* under the contract or otherwise for and/or in connection with the *works*) and generally does all things required by the *Project Manager* to achieve this end.

Z14 Intellectual Property

Z14.1 Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works.

Z14.2 IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works.*

Z14.3 The *Consultant* 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.

Z14.4 The *Consultant* 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:

Z14.4.1 the *Consultant's* design, manufacture, construction or execution of the Works;

Z14.4.2 the use of the *Consultant's* Equipment, or

Z14.4.3 the proper use of the Works.

Z14.5 The *Employer* shall, at the request and cost of the *Consultant*, assist in contesting the claim and the *Consultant* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Z14.6 The Consultant will not use in whatsoever manner any of the IP of the Employer without the prior written consent of the Employer.

Z15 Dispute resolution: The following amendments are made to Option W1:

Z15.1 Under clause W1.3, in the fourth row of the first column of the adjudication table, the following words are added after the words "any other matter": "excluding disputes relating to termination of the contract".

Z15.2 **The following clauses are added at the end of clause W1.3: "**The Adjudicator shall decide the dispute solely on the written submissions of the parties. No oral submissions shall be heard during adjudication."

Part C1.2b Contract Data

The conditions of contract are the NEC3 Professional Service Contract, April 2013

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Service Contract to which it mainly applies.

Part two - Data provided by the *Consultant*

Clause	Statement
10.1	The *Consultant* is (Name): Company VAT Number Address: Tel No.: Fax No.: Email:
22.1	The *Consultant's key person*s are: 1 Name: **Job Title:** Responsibilities: Qualifications: Experience: 2 Name: **Job Title:** Responsibilities: Qualifications: Experience: 3. Name **Job Title:** Responsibilities Qualification Experience **Attach more if required**

11.2(3)	The *completion date* for the whole of the *services* is as required by ACSA
11.2(10)	The following matters (if any) will be included in the Risk Register • Availability of As-Built Information • Access to Site • Progress vs Programme • Cash Flow Management
11.2(13)	The *staff rates* are as stated in the Pricing Data
25.2	The *Employer* provides access to the following persons, places and things

	access to	***access date***
1	All As-built Information & existing services	Upon award of the project(s)
2	Relevant Engineering, Operational and Maintenance Personnel of ACSA	Upon award of the project(s)

A	**Priced contract with activity schedule**
11.2(14)	The *activity schedule* is in the Pricing Data
11.2(18)	The tendered total of the Prices is in the Form of Offer and Acceptance

Part C2: Pricing Data

C2.1 Pricing Instructions

The appointment of the company, comprising the successful professional team, will be in accordance with the following built environment professional councils, amended in line with ACSA's specific requirements at an operational airport.

1	Mechanical Engineer	*Guideline Scope of Services and Recommended Guideline Tariff of Fees published by:* Engineering Profession Act (Act No. 46/2000) as per the Board Notice 138 of 2015, Government Gazette, 4 December 2015, or Engineering Council of South Africa (ECSA) (Engineering Profession Act of 2000 (Act No. 46 of 2000))
2	Electrical Engineer	*Guideline Scope of Services and Recommended Guideline Tariff of Fees published by:* Engineering Profession Act (Act No. 46/2000) as per the Board Notice 138 of 2015, Government Gazette, 4 December 2015, or Engineering Council of South Africa (ECSA) (Engineering Profession Act of 2000 (Act No. 46 of 2000))
3	Health and Safety Agent	*The South African Council for the Project and Construction Management Professions for:* Health and Safety Agents (Act No. 48 of 2000) as per the Board Notice 132 of 2011, Government Gazette, 12 August 2011 *or South African Council for the Project and Construction Management Professions (SACPCMP) (Project and Construction Management Profession Act of 2000 (Act No. 48 of 2000))*

The fee proposal shall be based on a percentage of the construction value, based on the recommended "Tariff of Fees" less the percentage discount being offered by the Tenderer. No admin fee shall be payable on sub-consultant remuneration, if applicable.

Tenderers must only price in accordance with the pricing schedule below, this will enable ACSA to compare priced offers. Failure to submit a priced offer using the prescribed schedule will make the bid liable for disqualification.

Remuneration for Professional Services

Remuneration for professional services will be on **Priced Contract with Activity Schedule** as outlined in the document below.

The pricing structure is as per the proposal submitted (Tender ref no. CIA RFQ 71725) by the *Consultants*.

C2.2 Price Schedule

Project Description / Name	**MANAGEMENT OF INSTALLATION OF PIT VALVES, FUEL DEPOT CHECK VALVES AND METERS REPLACEMENT AT AIRPORTS COMPANY SOUTH AFRICA CAPE TOWN INTERNATIONAL AIRPORT.**
Estimated cost of consultation	
Estimated cost for drafting and supplying system as built drawings	
Total estimated Project Cost (Excluding Fees & VAT)	
Estimated Installation/Construction Duration	
Estimated project Duration (Concept & Viability, Design, Procurement, Construction/Installation, Commission and Handover)	

Pricing structure per activity, as per the proposal submitted (Tender ref no.

Price Schedule 2: Time and Cost Fees

Basic Professional Fees **1.** Mechanical Engineer	Estimated construction Value R…… Offered fees Excl. VAT			
	Engineering Profession Act (Act No. 46/2000) as per the Board Notice 138 of 2015, Government Gazette, 4 December 2015, or Engineering Council of South Africa (ECSA) (Engineering Profession Act of 2000 (Act No. 46 of 2000))			
Stage of Services according to SACQSP	% Fee for each Stage	Amount (excl. VAT)	% Discount offered	Offered Fee (excluding VAT)
Stage 1 - Initiation	5			
Stage 2- Project Planning	15			
Stage 3- Construction Works	15			
Stage 4- Handover Works	15			
Stage 5- Close-out Project	40			
Sub-total				**R**
Additional Services: Level 3 Site Supervision (for the duration of construction)				
TOTAL				**R**

Basic Professional Fees **2.** Electrical Engineer	Estimated construction Value R…… Offered fees Excl. VAT			
	Engineering Profession Act (Act No. 46/2000) as per the Board Notice 138 of 2015, Government Gazette, 4 December 2015, or Engineering Council of South Africa (ECSA) (Engineering Profession Act of 2000 (Act No. 46 of 2000))			
	% Fee for each Stage	Amount (excl. VAT)	% Discount offered	Offered Fee (excluding VAT)
Stage 1 - Initiation	5			
Stage 2- Project Planning	15			
Stage 3- Construction Works	15			
Stage 4- Handover Works	15			
Stage 5- Close-out Project	40			
Sub-total				**R**
Additional Services: Level 3 Site Supervision (for the duration of construction)				
TOTAL				**R**

Basic Professional Fees **3.** Health and Safety Agent	Estimated construction Value R…… Offered fees Excl. VAT			
	Health and Safety Agents (Act No. 48 of 2000) as per the Board Notice 132 of 2011, Government Gazette, 12 August 2011 *or South African Council for the Project and Construction Management Professions (SACPCMP) (Project and Construction Management Profession Act of 2000 (Act No. 48 of 2000))*			
	% Fee for each Stage	Amount (excl. VAT)	% Discount offered	Offered Fee (excluding VAT)
Stage 1 - Initiation				
Phase 2- Project Planning				
Phase 3- Construction Works				
Phase 4 Monitoring and Controlling				
Phase 5- Close-out Project and Completion				
TOTAL				**R**

PROVISION FOR ANY ADDITIONAL WORK (OUTSIDE THE NORMAL SCOPE OF WORK) HOURLY RATES		
******** SUBJECT TO PRIOR APPROVAL BY ACSA*********		
DESCRIPTION	**ALL INCLUSIVE RATE**	
Mechanical Engineer	**EXCL VAT**	**INCL VAT**
Principals		
Salaried Professionals		
Senior Technician		
Health and Safety Agent	**EXCL VAT**	**INCL VAT**
Principals		
Salaried Professionals		
Senior Technician		
Electrical Engineer	**EXCL VAT**	**INCL VAT**
Principals		
Salaried Professionals		
Senior Technician		

Tenderer			
Signature:		**Date:**	

DISBURSEMENT SCHEDULE

(a) Only project related costs listed below and presented to ACSA will be compensated by ACSA.

(b) Any disbursement costs related to travelling to and from the airport or accommodation for the purpose of the project(s) is deemed to be inclusive in the agreed fee structure, unless otherwise agreed in writing by both parties. Disbursement costs not mentioned below (including under note (e)) may be brought to the attention of the ACSA project representative for approval and agreement on the recoverable amount, prior to incurring such cost.

(c) All rates are exclusive of VAT

(d) Cellular calls and Travelling during Construction will be recovered through the Contractors' Claim.

(e) Health and Safety Agent will be recovered through Disbursements.

(f) No mark-up on any disbursement cost will be paid.

(g) No payment for disbursement will be made for the following:
- Travelling (except for on-site travelling) and accommodation
- Typing of correspondence, payment certificates, variation orders, progress reports or financial reports
- Telephone calls
- Cellular calls
- Computer costs
- Telefaxes (outgoing or incoming)
- Email (sent or received)

Above expenses by the Tenderer are deemed to be inclusive in their professional fees.

Part C3: Scope of work

C3.1: Employer's Scope

Description of the *services*

1. Executive overview

The scope of works entails a complete assessment and replacement of fuel pit valves and flow meters for the Fuel system with a purpose of compiling a Bill of Quantities document and a specifications documentation to be issued out on tender.

2. Interpretation and terminology

The following abbreviations are used in this Scope:

Abbreviation	Meaning given to the abbreviation
ECSA	Engineering Council of South Africa
CTIA	Cape Town International Airport
NKP	National Key Point
CAA	Civil Aviation Authority
SANS	South African National Standards
FIDPM	Framework for Infrastructure Delivery and Procurement Management
JIG	Joint Inspection Group

3. Specification and Description of the Services

The professional service provider must carry out an assessment of the fuel system and identify the fuel system inadequacies and provide as built detailed drawing, report, design, and Bill of quantities (BOQ) for purpose of construction/replacements to bring the fuel system to optimal level of operation. Furthermore, to provide the documentation, contract administration and site supervision of the execution of the project.

The services required for this project are as agreed during the project handover meeting.

The broad scope of services and activities shall be in accordance with relevant sections of the Guideline for Services and processes for estimating fees for persons Registered in terms of the Act, 2000 (Act No. 46 of 2000), and as amended by the specific project requirements.

4. Background Information

The fuel system for Cape Twon International Airport which is responsible to transport fuel from the storage facilities at the depot to the airport airside where the aircraft refuelling takes place by means of refueler trucks through the pit valves. The system consists of pumps, valves, flow meters, pipes etc and of these components have reached their operational life expectancy and are worn out and require replacement. This project only aims at focusing on the fuel pit valves and the fuel flow meters, air eliminators replacement and modification of pipes.

Pit valves

Installation and Commissioning:

- **Replace all 38 Carter valves**
  - Replace all 20 Avery Hardoll valves with carter Valves
  - Installation of an adapter
  - Upgrade the pilot control valves from lanyard operated to dual air and lanyard operated pilot valves, this upgrade must comply to JIG requirements
  - Refurbishment of blanked pits
- **Develop drawings into As-Built as part of the EoJ Data Package**

Description	**Quantity**
Apron Area valves	22 (2 are not in use)
The new and old Bravo Area valves	54 (18 are blanks, 5 are not in use and 2 are low points)
Charlie Area valves	8 (4 not in use)

Flow Meters

Description	Quantity
Flow meters	4
Air eliminators	4
Check valves	4

ALPHA APRON			
LANYARD OPERATED	AIR OPERATED	VALVES NOT IN USE	BLANKED OFF PITS
7 - Off - Eaton Carter	8 - Off - Eaton Carter	2 - Off - Avery Hardoll	9 - Off
	5 - Off - Cla - Val Hydrant pit valve		YELLOW STEEL LIDS
	on spool piece		3 - Off
NEW BRAVO			
LANYARD OPERATED	AIR OPERATED	BLANKED OFF PITS	
7 -Off - Eaton Carter	3 - Off - Eaton Carter	5 - Off	
	2 - Off - Cla -Val Hydrant pit valve	3 - Off - blanks with sampling	
	on spool piece	valve on top	
	2 - Off - Cla -Val Hydrant pit valve		
	& Isolation valve		
OLD BRAVO			
LANYARD OPERATED	VALVES NOT IN USE	BLANKED OFF PITS	LOW POINTS
15 - Off - Avery Hardoll	5 - Off	10 - Off	2 - Off
CHARLIE			
LANYARD OPERATED	AIR OPERATED	VALVES NOT IN USE	
1 - Off - Eaton Carter	1 - Off - Eaton Carter	4 - Off	
	1 - Off - Cla - Val Hydrant pit valve		
	on spool piece		
	1 - Off - Cla - Val Hydrant pit valve		
	& Isolation valve		

8Note: the rest of the scope will be shared by the contract

5. The Scope of Services must be as per Project cycle management framework

5.1. Phase 1 and Phase 2: Initiation and planning

- Convene a project start-up meeting of the project.
- Create project plan.
- Attend project initiation meetings and stakeholder engagement meetings.
- Inspect the site and advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for stage 2 including the availability and location of infrastructure and services.
- Determine the availability of data, drawings and plans related to the project.
- Deliverables will include project plan, planned project schedule with estimated finish timelines, risk management plan, communication plan, site and functional requirements. Schedule of required surveys, tests, analyses, site and other investigations, Schedule of consents and approvals.

5.2. Phase 3: Execution

- Manage project resources.
- Deliverables quality check sheets, progress reports, updated schedules/project plans, updated risk plan, communication plan, project reports etc.
- Advise client on asset outages and duration of outages where applicable.

5.3. Stage 4: Monitoring and Controlling

- Quality Control works inspection and approval of work completed according to quality and specifications inclusive of a post as quality check plan.
- Conduct regular site meetings, technical meetings and other agreed meetings and Attend regular site, technical and progress meeting.
- Monitor implementation of quality assurance procedures by other contractors as per project plan.
- Prepare proactive estimates of proposed variations for client decision making.
- Assist in the resolution of financial claims by Contractor.
- Deliveries completed quality check sheets, progress reports, updated risk plan and schedule plan.

5.4. Stage 5: Handover and Completion

- Site handover to Client.
- Construction administration
- Practical Completion and defects list
- Completion Certificate
- Final Completion
- Fulfil and complete the project close out including necessary documentation to facilitate effective completion, handover and operation of the project.
- Inspect and verify the rectification of the defects.
- Receive, comment and approve relevant payment valuation and completion certificates.
- Facilitate and/or procure final operations and maintenance manuals, guarantees warranties.
- Prepare and procure as built drawings and documentation.

- Conclude the final accounts.
- Defects certificates and certificates of final completion are issued in terms of the contract.
- Final amount due to the contractor is certified, in terms of the contract.
- Prepare close-out report is and approved by the Client.

6. Scope of Deliverables Summary

The activities will include the following:

6.1 Inspection and audit of the project working areas of the fuel system focus on the specified scope.

6.2 Identify inadequacies and provide detailed report, prepare and provide report.

6.3 Compile a detailed project management plan that will take into consideration airport operational requirements, risk, safety during implementation. Include phase-by-phase commissioning and sign-off process.

6.4 Perform fulltime site supervision during the construction/ installation phase until handover.

6.5 Issue a sign-off certificate per area where works would have been performed confirming compliance to SANS codes and JIG requirements.

7. Design Specification/Standards

- Occupational Health and Safety Act. 1993 (Act No. 85 of 1993)
- ATA Specification 103
- SANS 62-1:2003, 10019 and other relevant
- SABS
- JIG standard EI/JIG 1530 and other relevant.
- API Standards 1595, 521, 686 and other relevant.
- Sky tanking specific standards and code

8. List of Drawings

Drawings issued by the *Employer*

	Drawing number	Revision	Title
1	01-2005-05	0	Airside layout
2			

9. Constraints on how the Consultant Provides the Services.

Management meetings

To be able to manage the contract, the Employer and Consultants will have various meetings, to proactively and jointly manage and minimise adverse risks to the project. The attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings.

Regular meetings of a general nature may be convened and chaired by the *Employer's Agent* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk registers and compensation events	Every two weeks	To be confirmed	*Employer's Agent, Consultant*

Overall contract progress and feedback	Monthly	To be confirmed	*Employer's Agent, Consultant*

Meetings of a specialist nature may be convened as specified elsewhere in this Scope or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *services*. Records of these meetings shall be submitted to the *Employer's Agent* by the person convening the meeting within five days of the meeting.

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

Consultant's key persons

The *Consultant* is required to nominate a senior partner or director who will have overall responsibility for this project and other senior personnel responsible for the execution of the project. No change may be made without prior consultation with and approval by the *Employer*.

The *Consultant* is required to submit an organogram showing the key persons and their lines of authority / communication.

10. Work Plan

Objectives

The project shall be done firstly in accordance with the Employer's objective as per his appointed NEC Scope of Works Briefing with detail tasks and deliverables for each of the project stages, i.e., Imitation and planning, execution, monitoring and completion/close out.

ISO Quality Management System

All projects shall be managed in accordance with strict ISO 9001 quality system ensuring quality in design, administration, reports and site administration. Consultants must be accredited with ISO9001 compliance, and each project shall be administrated with respect to quality and technical compliance, in accordance with these strict international Quality Procedures.

Programme and monthly feedback

A detailed programme for each project needs to be submitted within 14 days of appointment and updated regularly/monthly.

Consultation and Client Feedback

Detailed consultation with the designated ACSA representative and on-going feedback and reporting during feasibility preliminary design, detailed design and construction stages will be essential in delivering optimal and acceptable solutions which are in line with ACSA specifications and budget allocations. A monthly progress and cost report shall be done from detail design stage onwards till construction ends.

Understanding the Works

The Employer is not responsible for the failure of the Consultant to understand the precise nature of his undertaking under this contract or for any erroneous interpretation concerning the conditions affecting his performance, it being recognized that the Employer provided the Consultant sufficient opportunity to ask

the Employer for clarification of the terms and conditions of this contract prior to submission of his tender to provide the services.

Compliance with Laws

The Consultant keeps himself fully informed of and complies with all laws which apply to the Works and/or Services and/or to Providing the Works and/or Services (including laws which apply to persons employed to provide the Services and/or Works). “Laws” includes all national and provincial legislation, statutes ordinances and other laws and regulations and by-laws, orders and decrees of government or other legally constituted public authority and the common law.

Compliance with Codes & Standards

The Services comply with the codes and standards stated in the Scope. To the extent not stated, the Services comply with internationally recognised codes and standards which are accepted by the Employer.

In case of conflict between national, international codes, standards or guidelines and/or the requirements specified in this Scope, and unless otherwise instructed by the Employer, the more onerous one takes precedence; provided always that the Services comply as a minimum and in any event, with applicable law and mandatory South African national codes, standards and guidelines.

Health and safety

The *Consultant* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *service*s.

The *Consultant* shall comply with the Health and Safety requirements contained in section C4.4.

Health and Safety Agent shall be appointed for the construction phase. The Health and Safety Agent will audit the construction and check whether the Contractor is complying with the law, the specification as set out by the Employer as well as the Health and Safety specification as set out in the Contract document.

The Health and Safety Agent will submit a monthly report to the *Employer*’s Safety Department and give a report back at the Monthly Site Meetings.

11. Procurement

BBBEE and Preferencing Scheme

As your appointment is made on the basis of Black Economic Empowerment within your company, your BBBEE rating must be maintained, or improved, for the duration of the appointment.

12. Working on the Employer’s property

Work done on or near an active airport is subject to several special requirements and conditions to ensure the safe operation of the airport at all times. Various limitations and requirements are to be taken cognisance of during the preparation of the tender and construction programme.

This work will be on the Airside area of the airport and the normal operations must be able to continue for the duration of the contract.

Please also refer to C4.3: **SPECIAL REQUIREMENTS AT AN OPERATIONAL AIRPORT**.

People restrictions, hours of work, conduct and records

The work under this contract is to be carried out under operational conditions of the airport and is therefore subject to several special requirements and conditions to ensure the safe operation of the airport at all times.

The *Consultant* keeps records of his people working on the *Employer*'s property, including those of his Sub-consultants, and the *Employer's Agent* shall have access to these records at any time.

13. Cooperating with and obtaining acceptance of Others

Whenever work being done by Others on the project is dependent on or adjacent or related to the Services, the interface and sequence of such works and the Services should be such that the least interference possible will result to the Consultant and to Others and such sequence is determined by the Employer. Cooperation is required between the *Consultant* and Others to ensure the completion of the Services and other project works within the programme for the project as a whole.

As may be required from time to time or as per statutory requirements, the *Consultant* will liaise with and obtain acceptance from statutory authorities and avail themselves for any inspections that would be required.

At the earliest possible date, detailed programmes prepared for all other project works having interfaces with the Services are discussed by the Employer with the Consultant in order that the phasing, duration, use of working areas, attendance work etc. can be drawn into overall programmes for the project works.

14. Things provided by the Employer

The *Employer* will issue to the *Consultant* available information that will assist in the carrying out of the services. This information may include Base plans to indicate existing services.

The providing of this information does not relieve the *Consultant* of their professional responsibility to verify information that will be used as a basis for their designs.

Part C4 Site Information

C4.1 Site Information

Description of the Site and its surroundings

General description

The site is the Cape Town International Airport and is situated on Landside, Terminal Buildings and Airside part of the airside. The site is situated in an active part of the airport where normal operations will be continuing during the execution of this project.

Aerial View of the Airport Precinct- SOB Airside Offices – Google images

Existing valves (not visible on the picture but located on various parking bays)**, on the Site.**

Subsoil Information

If this information is required for delivery of this project, then it must be costed as part of the deliverables.

Hidden Services

The equipment/components to be replaced are not stand alone but part of an operational system therefore, there could be system restraints which might need minor modification prior to the main replacement. These can mostly be encountered during the replacement of flow meters, air eliminators, etc and shall be identified and outlined during the assessment of the system.

Part C4.2: Insurance Clauses for Capex Projects

Section A: Definitions

Landside refers to:

- Areas of the airport before the security points, and
- The restricted area beyond the security points but, within the perimeter of gatehouses, passenger terminals and cargo buildings

Airside refers to:

- The Apron / manoeuvring areas
- Area within the airside boundary/perimeter fence, excluding the internal areas of the passenger terminals, perimeter gatehouses and cargo buildings

Section B: Insurance Clauses

1. Insurance requirements for contracts with a value below R50million on the LANDSIDE

1.1 Contract Works

- With regards to contract works claims, the contractor/consultant is responsible for a deductible (excess) of R250 000.
- Contractors / consultants may re-insure the deductible

1.2 Public Liability

- In the event of a claim against the contractor / consultant for 3rd party property damage the contractor / consultant will be responsible for a deductible (excess) of R275 000
- In the event of a claim against the contractor / consultant for removal of lateral support, the contractor / consultant will be responsible for a deductible (excess) of R500 000
- Contractors / consultants may re-insure the deductibles

1.3 Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R5million
- Contractors who have a material design element, excluding typical P & G related work, as part of their scope, are responsible for Professional Indemnity cover of R5million
- In the event of a claim above R5million, the ACSA PI cover will kick in for the amount in excess of R5m.
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the contractor and/or consultant.

2. Insurance requirements for contracts below R50million on the AIRSIDE

2.1 Contract Works

- With regards to contract works claims, the contractor / consultant is responsible for a deductible (excess) of R250 000.
- Contractors / consultants may re-insure the deductible

2.2 Public Liability

- In the event of a claim brought against the contractor / consultant for 3rd party property damage the contractor / consultant will be responsible for a deductible (excess) of R525 000

- In the event of a claim brought against the contractor / consultant for removal of lateral support, the contractor / consultant will be responsible for a deductible (excess) of R750 000
- In the event of a claim brought against the contractor / consultant for damage to aircraft, the contractor / consultant will be responsible for a deductible (excess) of R750 000
- Contractors / consultants may re-insure the deductibles

2.3 Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R5million
- Contractors who have a material design element, excluding typical P & G related work, as part of their scope, are responsible for a Professional Indemnity cover of R5million.
- In the event of a claim above R5million, the ACSA PI cover will kick in for the amount in excess of R5million.
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the contractor and/or consultant.

3. Insurance requirements for contracts with a value above R50 million on the LANDSIDE

- Contracts with a value of more R50 million are not automatically covered under the construction policies. A separate quote is provided by insurers per contract.

3.1 Contract Works

With regards to contract works claims, the contractor / consultant is responsible for the following deductibles:

- All Civil Work and Earthworks – R300 000 deductible (excess)
- All other claims – R300 000 deductible (excess)
- Other property insured – R700 000 deductible (excess)
- Contractors / consultants may re-insure the deductibles

3.2 Public Liability

- In the event of a claim brought against the contractor / consultant for 3rd party property damage the contractor / consultant will be responsible for a deductible (excess) of R275 000
- In the event of a claim brought against the contractor / consultant for removal of lateral support, the contractor / consultant will be responsible for a deductible (excess) of R500 000
- Contractors / consultants may re-insure the deductibles

3.3 Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R10million
- Contractors who have a material design element, excluding typical P & G related work, as part of their scope, are responsible for a Professional Indemnity cover of R10million
- In the event of a claim above R10million, the ACSA PI cover will kick in for the amount in excess of R10m
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the contractor and/or consultant.

4. Insurance requirements for contracts with a value above R50 million on the AIRSIDE

- Contracts with a value of more R50 million are not automatically covered under the construction policies. A separate quote is provided by insurers per contract.

4.1. Contract Works

With regards to contract works claims, the contractor / consultant is responsible for the following deductibles:

- All Civil Work and Earthworks excluding Runways – R300 000 deductible (excess)
- Runway Rehabilitation – R300 000 deductible (excess)
- New Runway Construction – R700 000 deductible (excess)
- All other claims – R300 000 deductible (excess)
- Other property insured – R700 000 deductible (excess)
- Contractors / consultants may re-insure the deductibles

4.2. Public Liability

- In the event of a claim brought against the contractor / consultant for 3rd party property damage the contractor / consultant will be responsible for a deductible (excess) of R1 025 000
- In the event of a claim brought against the contractor / consultant for removal of lateral support, the contractor / consultant will be responsible for a deductible (excess) of R1 250 000
- In the event of a claim for damage to aircraft, the contractor / consultant will be responsible for a deductible (excess) of R1 250 000
- Contractors / consultants may re-insure the deductibles

4.3. Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R10million
- Contractors who have a material design element, excluding typical P & G related work, as part of their scope, are responsible for a Professional Indemnity cover of R10million
- In the event of a claim above R10million, the ACSA PI cover will kick in for the amount in excess of R10m
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the contractor and/or consultant.

Part C4.3 – ACSA SPECIAL REQUIREMENTS AT AN OPERATIONAL AIRPORT

Work done on or near an active airport is subject to several special requirements and conditions to ensure the safe operation of the airport at all times.

The work under this contract is to be carried out under operational conditions. Various limitations and requirements are to be taken cognizance of during the preparation of the tender and the construction programme. These limitations will not entitle the contractor to claim for extension of time.

1. Airports Manager

The Airports Manager is at all times responsible for the effective and safe operation of the airport. The Airports Manager or his designated representative will represent the Employer at the airport, and he has full authority to act on behalf of the Employer, as set out in the contract documents.

The Airport manager will issue the necessary application forms to those who apply to the airport management for an airside vehicle permit and/or an Airport Security Permit and will decide, on receipt of the completed forms, whether or not to issue permits.

The Airport Management may at any time withdraw or suspend an Airside vehicle Permit or any Airside Security Permit.

All negotiations between the Contractor and the airport management shall be through the Engineer.

2. Airport Security and Safety

All personnel of the Engineer or Contractor will have to undergo a Security and Safety Awareness Programme before the start of the contract.

The Engineer/Contractor shall ensure that airport security is at all times complied with by his own personnel, all subcontractors and their personnel as well as all suppliers.

Access to the security area for personnel, vehicles and construction plant can only be obtained with permission from the Employer. Permits may be required for personnel and vehicles frequently moving through the security check points and shall at all times be visibly displayed while a person or vehicle is within the security area. Identity Documents must be available and presented on request.

Permits are only valid for a specific area inside the security area and the responsibility rests with the Contractor to control the movement of personnel, plant and vehicles to ensure their compliance with this requirement. A Prime Cost Sum has been provided for the cost of any permits required.

The Contractor will be required to provide permits for each and every material delivery vehicle entering the site, and they are to be escorted by a permit and radio license holder. The Employer may withdraw any or all permits without prior notice in the case of misuse, in which case the Contractor will have no claim against the Employer.

The Contractor shall make specific arrangements with the Employer, through the Engineer, to ensure the expedient delivery of time-dependent materials such as asphalt. If required, the Contractor shall supply additional security personnel, approved by the Airport Manager to assist with security control. If, due to the extra volume of construction traffic that has to pass through security, additional entrance

facilities have to be provided, it shall be done in consultation with the Airport Manager and Engineer. These facilities and personnel have to be provided by the Contractor.

3. Responsibilities of Consulting Engineers/Contractor

As a condition of approval of an application for an Airside Vehicle Permit, the Consulting Engineer/Contractor shall ensure that all vehicles and drivers are covered by the Contract Works, Public Liability and SASRIA Special Risks Insurance.

When a vehicle is no longer required for airside use, the Engineer/ Contractor must upon removing it from airside use, remove and return the Airside Vehicle Permit to the airport manager.

The Engineer/Contractor shall immediately report to the airport manager all notifiable accidents and shall ensure that arrangements are in place for the rapid removal and/or repair of its vehicles should they become immobilised on movement areas.

Plant, equipment and personnel of the Engineer/Contractor shall at all times operate and remain 50m clear of all active runways and taxiways (measured from nearest edge of facilities). In Cat 2 conditions the 50m increases to 100m.

4. Accident/low service damages

The Engineer/Contractor shall report to the Airport Manager any accident involving vehicle or plant under their control where the accident has involved injury or damage to another vehicle, aircraft or airport property; or where there is injury to driver(s) or passenger(s) in the vehicle. The prescribed accident report shall be used for this purpose.

Distinction will be made between the following types of accidents:

(i) Accidents of minor nature not having effect on the operational efficiency of the involved vehicles, building or airport property.

(ii) Accidents causing property damage affecting the operational efficiency of vehicles or infrastructure or causing injury to persons traveling in vehicles.

Accidents in the first category must be reported to the Airport Manager within 24 hours. Accidents in the second category must be reported to the Airport Manager immediately and the South African Police Services (SAPS) shall be called to the accident site to investigate and report on the causes of the accident. Where possible neither the driver, the passenger or vehicles should leave the accident site before the arrival of the SAPS.

The parties involved must ensure that adequate arrangements are made for the rapid removal or repair of the immobilised vehicles on **operational** areas.

All accidents/incidents, irrespective of the seriousness thereof, affecting aircraft or loading bridges, must be reported immediately to the AM.

The Airport Manager reserves the right to:

- Withdraw any airport security permit.
- Withdraw any airside vehicle permit if it is considered necessary tow away vehicles when parked incorrectly.

- **Low service damages (as defined in clause x17)**

Item Description	Low service damages amount
Not Submitting project plans 21 days after the first project meeting.	R5000
Not Submitting a project progress report 14 days after the execution has started	R5000
50% Uncommunicated deviation from the project schedule	R5000
Uncommunicated quality noncompliance on the construction works for each individual installation.	R10 000
Noncompliance to the Response time as stipulated in the contract data sheet of this contract.	R5000

5. Identification and Warning Lights

All construction vehicles and self-propelled plant used inside the security area shall be properly marked to promote easy identification. A register of all identification numbers for all vehicles shall be kept up to date by the Contractor and shall at all times be available for inspection by the Airport Manager or Engineer. Each vehicle or self-propelled plant item, as required by the Engineer, shall be fitted with an approved amber rotating warning light which shall be in continuous operation while the vehicle is moving in the security area. The Contractor will be responsible for all costs involved in this item.

6. Additional Security Measures

- No cameras or the taking of photos will be allowed within the security area without written approval from the Airport Manager. No fire-arms, explosives or any other weapons may be brought into the security area.

- Smoking and the making of fires are prohibited in certain areas of the airport. Open fires may only be made in designated areas after written permission has been obtained from the Airport Manager, who will also supervise such fires. No smoking is allowed in the apron areas.

- No accommodation of personnel will be allowed in the security area of the airport.

- No drawings, sketches, diagrams, information, etc. pertaining to the works, airport, accidents, etc. may be made, reproduced or registered, except when it is necessary for the execution of the contract. No information regarding accidents, airport activities, reports, etc. shall be given to anybody and no press release shall be made, or interview may be given to anybody without the written permission from the Airport Manager.

- Any interference with airport personnel, equipment or aircraft will be considered as an infringement of this clause. The Contractor will be held responsible for any damage, direct or indirect, to any airport equipment, aircraft, etc. caused by his own personnel or those of his subcontractors or suppliers whether on duty or not. The Contractor shall make good all costs necessary to remedy the situation including re-calibration of equipment where necessary. The Contractor shall note that especially navigation equipment is extremely sensitive and may be disturbed by sitting or leaning on it.

- No aircraft may be touched or moved by any member of the construction team. In case of an aircraft accident, no assistance whatsoever may be given by the Contractor unless specifically requested and all staff must stay away from any part of an accident scene for a distance of at least 300m.

If the Contractor is found lacking in any of the security measures or requirements, it will be sufficient cause for the termination of all construction activities until the matter has been rectified to the satisfaction of the Airport Manager.

No claim resulting from inadequate security and safety measures will be considered.

7. Compliance with Instructions

If the Contractor does not promptly comply with all instructions of the Airport Manager and Engineer, the Employer has the right to amend the working schedule in aid of safety. The Engineer also retains the right to suspend all works until the Contractor, in the opinion of the Engineer, complies with the requirements.

8. Delays Caused by Airport Management

If delays, leading to an extension of time, are caused by aspects such as airport requirements, a reasonable claim for extension of time may be considered. However, if such delays coincide with delays caused by other circumstances, such as weather conditions, no claim for extension of time caused by requirements of airport management will be considered.

9. General Requirements for Execution of the Work

At the end of each work period, all plant, vehicles, material and obstructions must be removed to a demarcated safe area. The cost of removal of plant and materials and cleaning operations shall be deemed to be included in the relevant work items or in the general items. The Engineer reserves the right to ban any item of plant or equipment which leaks excessive amounts of fuel or oil. In addition, all significant spillages of fuels and oils will be cleared immediately to the satisfaction of the Engineer failing which the Engineer reserves the right to have this work carried out by a third party to the cost of the Contractor.

The Employer retains the right to clean any of the mentioned areas if the Contractor neglects to do so to his satisfaction. In such a case the costs incurred by the Employer will be recovered from the Contractor at a rate of R400,00 per hour or part thereof taken by the sweeping machine of the Employer to do the work. This cost will be deducted from any monies payable to the Contractor.

If night work has to be done only suitable power and lighting units, approved by the Engineer, complying with the requirements of the Occupational Health and Safety Act No. 85 of 1993, SABS 0142-1981and ICAO Annex 14 regulations shall be used.

10. Times for the Execution of the Works

Most of the work on this contract must be executed minimizing disruptions to airport operations. If, due to airport requirements, certain aspects of the work have to be done during nighttime, the following will apply:

- The Contractor shall supply sufficient lighting facilities to enable him and his subcontractors to perform the work according to the requirements of the specification.

- At the end of the night's work all lights, power plants, etc. must be removed to a safe area indicated by the Engineer and the Airport Manager. Remuneration for the acquisition, transport, erection and maintenance of lighting and power plants shall be included in the items provided and shall be all-inclusive. Power plants that spill fuel or oil will not be allowed on the works.

11. Movement on the Airport, Barriers, Lights and Marks

It is the responsibility of the Contractor to properly control the movement of personnel, vehicles and plant connected to the contract. The Contractor shall erect, remove and maintain all temporary barriers, warning lights and marks as required by the Airport Manager.

These control and limitations to movement of the Contractor will not be paid for separately and sufficient provision for it shall be made in the tendered items. Delays and disruption of the contractor's programme or progress as a result of the above requirements will not constitute reason for a claim of whatever nature.

12. Dust and Pollution Control

The Contractor shall limit dust pollution to the minimum as required by the Airport Manager. During windy conditions, the Engineer may temporarily suspend all work where dust pollution creates unacceptable conditions until such time that conditions return to normal.

In the case of working areas alongside the taxiways it shall be a definite requirement that at all times, weekends included, exposed areas are kept damp and free from dust and loose material which may be sucked into the engines of passing aircraft. The taxiways adjacent to the works shall be swept as required but at least daily.

All costs involved in dust and pollution control shall be borne by the Contractor.

13. Storing of Vehicles, Plant and Materials

It is a requirement that, at the end of each work period, all vehicles and plant are returned to the designated camp area allocated to the Contractor. With the approval of the Project Manager / Engineer, certain equipment may remain on or near the work area if the area is properly demarcated.

If material is temporarily stored outside the designated campsite, stockpiles shall be limited to a height of 1, 0 m above natural ground level.

14. Fires

No open fires whatsoever will be allowed. All necessary precautions must be taken to prevent veld or other unauthorized fires.

In the case of fire, including veld fires, the Contractor must instruct his employees to assist the airport management in extinguishing the fire if requested to do so.

The Contractor shall indemnify the Employer against claims that may arise from fires due to negligence by the Contractor or his operations. If it is required by the Employer to extinguish any fires caused by the Contractor, the cost thereof will be for the Contractor.

In case of a fire caused by air traffic activities, the area involved shall immediately be evacuated by the Contractor to an area beyond a radius of 300 m from the fire.

15. Environmental

The Airports Company South Africa (ACSA) recognises the impacts airport expansion projects have on the environment during the planning, design and construction phase of new projects and embraces the obligations of corporate environmental responsibility to manage and minimise these impacts as far as possible.

Design consultants are encouraged to explore and implement (where possible) feasible opportunities for minimising environmental impacts in the form of stormwater, soil and groundwater pollution, resource, and raw material utilisation, as well as energy and water conservation measures.

C4.4 – ACSA OCCUPATIONAL HEALTH & SAFETY SPECIFICATION FOR ACSA

TABLE OF CONTENTS

36. Edge Protection and Penetration
37. Confined Space Entry
38. Liquor, Drugs, Dangerous Weapons, Firearms
39. Internal/External Audits
40. Penalties

Client	Airports Company South Africa SOC Ltd – Cape Town International Airport
Project Brief	Fuel Pit valves and Flow meters replacement
Project	Fuel Pit valves and Flow meters replacement
Location	Fuel farm and Airport airside area

INTRODUCTION

In terms of the Construction Regulation 5(1) b the client, is required to compile a Health & Safety specification for any intended project and provide such specification to any prospective contractor and designers. The contractor, on appointment shall submit a Health & Safety plan which shall address the requirements of this specification.

This specification objective is to ensure that the contractor(s) entering into a contract with ACSA achieve an acceptable level of OH&S performance. This document forms an integral part of Project Information and the contract. Principle and other contractors should make it part of any contract that they may have with their contractors and /or suppliers.

Compliance with this document does not absolve the client from complying with minimum legal requirements and the client remains responsible for the health & safety of his employees and those of his mandatories. ACSA reserves the right to audit, monitor and where necessary regulate the site work activities of any principle contractor or appointed subcontractor as per Construction Regulation 5(1) (o) and section 5 of this document.

1. SCOPE AND DESCRIPTION OF PROJECT

Project Description: The scope of works entails a complete assessment and replacement of the pit valves and flow meters on the fuel line with a purpose of compiling a Bill of Quantities document and a specifications documentation to be issued out on tender for replacement execution.

Boundaries	Works will be limited to airside and Fuel farm
Existing Services	- Pit lids maintenance - Fuel transportation via the fuel lines from the fuel farm to the airside area
Roads and Traffic Systems	None
Existing Structures	- Overall fuel system and storage facilities.

2. DEFINITIONS

The definitions as listed in the OHS Act and Construction Regulations 84 of 7 February 2014 shall apply. Therefore, all references to the old Construction Regulations will change to the new Construction/installations Regulations.

Client: means any person for whom construction work is being performed.
Principal Contractor: means an employer appointed by the client to perform construction work
Contractor: means an employer who performs construction work;
Construction work: means any work in connection with,

- _ the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- _ the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

Competent person: means a person who,

a) has in respect of the work or task to be performed the required knowledge, training, and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
b) is familiar with the Act and with the applicable regulations made under the Act;

Designer: means
(a) competent person who

i.) prepares a design;
ii.) checks and approves a design; or
iii.) arranges for any person at work under his or her control to prepare a design
iv.) including an employee of that person where he/she is the employer or
v.) designs temporary work, including its components,

(b) an architect or engineer contributing to, or having overall responsibility for a design;

(c) a building services engineer designing details for fixed plant;

(d) a surveyor specifying articles or drawing up specifications;

(e) A Contractor carrying out design work as part of a design and building project; or

(f) an interior designer, shop-fitter, or landscape architect;

Fall prevention equipment means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment;
Fall arrest equipment means equipment used to arrest a person in a fall, including personal equipment
such as body harness, lanyards, deceleration devices, lifelines, or similar equipment.

Hazard: means a source of or exposure to danger
Hazard identification: means the identification and documenting of existing or expected hazards to the
health and safety of persons, which are normally associated with the type of construction work being executed or to be executed

Risk assessment: means the process contemplated in paragraph 10 of the specifications.

Excavation work: means the making of any man-made cavity, trench, pit, or depression formed by cutting, digging, or scooping;

Ergonomics: means the application of scientific information concerning humans to the design of objects, systems, and the environment for human use in order to optimise human well-being and overall system performance;

3. NOTIFICATION OF CONSTRUCTION

(Construction Regulation 4)

The Principal Contractor who intends to carry out any construction work must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work will—

(a) include excavation work;
(b) include working at a height where there is risk of falling;
(c) include the demolition of a structure; or
(d) Include the use of explosives to perform construction work.

4. DUTIES OF THE PRINCIPAL CONTRACTOR AND CONTRACTOR

(Construction Regulation 7)

The Principal Contractor must:

(a) Provide and demonstrate to the client a suitable, sufficiently documented, and coherent site specific health and safety plan, based on the client's documented health and safety specifications. The plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the Principal Contractor as work progresses;

(b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, which must be made available on request to an inspector, the client, the client's agent, or Contractor; and

(c) On appointing any other Contractor, in order to ensure compliance with the provisions of the Act—

i.) Provide contractors who are tendering to perform construction work for the Principal Contractor, with the relevant sections of the health and safety specifications pertaining to the construction work which has to be performed;
ii.) Ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
iii.) Ensure that no contractor is appointed to perform construction work unless the Principal Contractor is reasonably satisfied that the contractor that he/she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
iv.) Ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
v.) Appoint each contractor in writing for the part of the project on the construction site;
vi.) Take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
vii.) Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the Contractor and Principal Contractor, but at least once every 30 days;
viii.) Stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the Principal Contractor's health and safety plan, or which poses a threat to the health and safety of persons;
ix.) Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and
x.) Discuss and negotiate with the contractor the contents of the health and safety plan and must thereafter finally approve that plan for implementation;

(d) Ensure that a copy of his or her health and safety plan, as well as the contractor's health and safety plan is available on request to an employee, an Inspector, a Contractor, the Client, or the Client's Agent;

(e) Hand over a consolidated health and safety file to the client upon completion of the construction work and must, in addition to the documentation include a record of all drawings, designs, materials used and other similar information concerning the completed structure;

(f) In addition to the documentation required in the health and safety file, include and make available a comprehensive and updated list of all the Contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done; and

(g) Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

The Principal Contractor must take reasonable steps to ensure co-operation between all contractors appointed by the Principal Contractor to enable each of those contractors to comply with this specification.

No contractor may allow or permit any employee or visitor to enter the site, unless that employee or visitor has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry and must ensure all have the necessary personal protective equipment.

The Contractor must prior to performing any construction work:

(a) Provide and demonstrate to the Principal Contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification. The aforementioned plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;

(b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, and which must be made available on request to an Inspector, the Client, the Client's Agent or the Principal Contractor;

(c) Before appointing another contractor to perform construction work, be reasonably satisfied that the contractor that he/she intends to appoint has the necessary competencies and resources to perform the construction work safely;

(d) Co-operate with the Principal Contractor as far as is necessary ensuring all comply with the provisions of the Act; and

(e) As far as is reasonably practicable, promptly provide the contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

Where the contractor appoints another contractor to perform construction work, the duties determined in **section 5** of this document applies to the contractor as if he/she were the Principal Contractor.

A Contractor must at all times keep records of the health and safety induction training and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor.

A Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

5. MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

(Construction Regulation 8)

The Principal Contractor must in writing appoint one full-time competent person as the Construction Manager with the duty of managing all the construction work on a single site, including the duty of ensuring Occupational Health and Safety compliance, and in the absence of the Construction Manager an alternate must be appointed by the Principal Contractor.

The Principal Contractor must upon having considered the size of the project, in writing appoint one or more assistant Construction Managers for different sections thereof: Provided that the designation of any such person does not relieve the Construction Manager of any personal accountability for failing in his or her management duties in terms of this regulation.

No Construction Manager appointed under paragraph 6 above may manage any construction work on or in any construction site other than the site in respect of which he/she has been appointed.

A Contractor must, after consultation with the client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site.

No Contractor may appoint a Construction Health and Safety Officer to assist in the control of health and safety related aspects on the site unless he/she is reasonably satisfied that the construction health and safety officer that he/she intends to appoint has necessary competencies and resources to assist the Principal Contractor

A Construction Manager must in writing appoint Construction Supervisors responsible for construction activities and ensuring Occupational Health and Safety compliance on the construction site.
A Contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the Construction Supervisor contemplated in **paragraph 6** above, and every such employee has, to the extent clearly defined by the Principal Contractor in the letter of appointment, the same duties as the Construction Supervisor: Provided that the designation of any such employee does not relieve the Construction Supervisor of any personal accountability for failing in his or her supervisory duties in terms of this section in the specification..
No Construction Supervisor appointed under paragraph 6 above may supervise any construction work on or in any construction site other than the site in respect of which he/she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed Construction Supervisor may supervise more than one site.

6. REGISTRATION WITH THE WORKMEN'S COMPENSATION OR LICENSED INSURER

The Principal Contractor(s) must ensure that ACSA is provided with a valid letter of good standing, including a registration number with the Compensation for Occupational Injury and Diseases Fund or an alternative scheme approved in writing by the Commissioner to the COID Fund, at least 10 days prior commencement of construction work. It must remain the Principal Contractor's responsibility to furnish ACSA with a valid letter of good standing or keep a copy available for perusal by a Client, Client Representatives or any other person authorised thereto.

7. MANDATORY AGREEMENT

A duly signed mandatory form also referred to as 'OHS Act section 37.2' must be obtained from ACSA Safety Department. It must be signed and returned to ACSA by the Principal Contractor at least 10 days prior to commencement of construction work. The Principal Contractor must ensure that all its contractors have completed a similar document and a proof of such signed documents is submitted to ACSA for reference purposes.

8. ASSIGNED PERSON IN TERMS OF OCCUPATIONAL HEALTH & SAFETY ACT OF 1993 & APPLICABLE REGULATIONS

A written letter of appointment must be forwarded to ACSA duly signed by responsible persons at least 3 days prior commencement of construction work for the following duties: **(Further appointments could become necessary as the project progresses and as per the requirements of OHS Act 85/1993)**

(a) Person assigned duties in terms of the 16.2 appointees of the Act
(b) Construction Manager CR8(1)
(c) Assistant Construction Manager CR8(2) - *where applicable*
(d) Full-time or part-time Construction Safety Officer CR8(5)
(e) Construction Supervisor CR8(7))
(f) Assistant Construction Supervisor CR8(8) - *where applicable*
(g) Risk Assessor CR9(1)
(h) Fall Protection Developer/Planner CR10(1) - *where applicable*
(i) Temporary Works Designer CR11(1) - *where applicable*
(j) Temporary Works Supervisor CR11(2) - *where applicable*
(k) Excavation Supervisor CR13(1)a) - *where applicable*
(l) Demolition Work Supervisor and Controller CR14(1) - *where applicable*
(m) Scaffolding Supervisor CR16(1) - *where applicable*
(n) Scaffolding Team leader CR16(1) - *where applicable*
(o) Scaffolding Inspector CR16(1) - *where applicable*
(p) Scaffolding Erector CR16(1) - *where applicable*
(q) Suspended Platforms Supervisor CR17(1) - *where applicable*
(r) Rope Access Supervisor CR18(1)a) - *where applicable*
(s) Rope Access Fall Protection Plan Developed (R18(2)b) - *where applicable*
(t) Material Hoist Inspector CR19(8)a) - *where applicable*
(u) Bulk Mixing Plant Supervisor CR20(1) - *where applicable*
(v) Explosive Actuated Fastening Devise Operator CR21(2)b) - *where applicable*

(w) Explosive Actuated Fastening Device Controller CR21(2)g(i) - *where applicable*
(x) Construction Vehicles and Mobile Plant Operator CR23(1)d(i) - *where applicable*
(y) Temporary Electrical Installations Controller CR24(c) - *where applicable*
(z) Portable Electrical Equipment Supervisor CR24(d) - *where applicable*
(aa) Fire Equipment Inspector CR29(h) - *where applicable*
(bb) First Aider GSR3(4) -- *where applicable*
(cc) Stacking Supervisor (CR28(a)) (GSR2(a)
(dd) Competent Person in Confined Space Entry GSR5(1) - *where applicable*
(ee) Gas Cutting/Welding Supervisor (GSR9(a) - *where applicable*
(ff) Ladder Supervisor and Inspector (GSR13(a) - *where applicable*
(gg) Lifting Machine Inspector (DMR18(7) - *where applicable*
(hh) Lifting Tackle Inspector (DMR18(10)e) - *where applicable*
(ii) Lifting Machine Supervisor (DMR18(11) - *where applicable*
(jj) Supervisor of Machinery (GMR1) - *where applicable*
(kk) Safety Representatives (OHS Act Sec.17 - *where applicable*
(ll) Hazardous Chemical Substances Controller/Co-ordinator HCSR10 - *where applicable*
(mm) Incident Investigator (GAR9(2)
(nn) Blasting Supervisor (Supervision of Explosives Workplace ER12) - *where applicable*

9. HEALTH AND SAFETY DOCUMENTATION

The Principal Contractor must provide and demonstrate to ACSA a suitable, sufficiently documented and coherent site specific health and safety plan, based on ACSA's documented health and safety specifications. The health and safety plan must include but not limited to the following during tendering process, before commencement of construction work and during construction:

Principal Contractor's Health & Safety Policy
The Principal Contractor must provide a health & safety policy signed by the Chief Executive Officer (CEO) which outlines Principal Contractor's commitment towards health and safety

Health and Safety Organogram
The Principal Contractor must provide a health & safety organogram which outlines related appointments in terms of the OHS Act and applicable Regulations. Contact numbers should also be provided for easy reference.

10. RISK ASSESSMENT

(Construction Regulation 9)

A Contractor must, before the commencement of any construction work and during such construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site, and must include—

(a) the identification of the risks and hazards to which persons may be exposed to;
(b) an analysis and evaluation of the risks and hazards identified based on a documented method;
(c) a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
(d) a monitoring plan; and
(e) a review plans.

A Contractor must ensure that:

(f) as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment
(g) that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site

(h) Principal Contractor must ensure that all Contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site
(i) consult with the health and safety committee or, if no health and safety committee exist, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site
(j) copies of the risk assessments of the relevant site are available on site for inspection by an inspector, the client, the client's agent, any Principal Contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee
(k) review the relevant risk assessment—
  i. where changes are affected to the design and or construction that result in a change to the risk profile; or
  ii. when an incident has occurred.

11. FALL PROTECTION PLAN

(Construction Regulation 10)

A Contractor must

(a) designate a competent person to be responsible for the preparation of a fall protection plan;
(b) ensure that the fall protection plan contemplated above is implemented, amended where and when necessary and maintained as required; and
(c) take steps to ensure continued adherence to the fall protection plan.

The Fall Protection Plan must include

(a) a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
(b) the processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
(c) a programme for the training of employees working from a fall risk position and the records thereof;
(d) the procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
(e) a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

A Contractor must ensure that:

(a) **The Construction Manager** appointed under **Construction Regulation 8(1)** is in possession of the most recently updated version of the fall protection plan.
(b) all unprotected openings in floors, edges, slabs, hatchways, and stairways are adequately guarded, fenced, or barricaded or that similar means are used to safeguard any person from falling through such openings;
(c) no person is required to work in a fall risk position, unless such work is performed safely as contemplated in above;
(d) fall prevention and fall arrest equipment are
  (i) approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and
  (ii) securely attached to a structure or plant, and the structure or plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
(e) fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.

Where roof work is being performed on a construction site, the Contractor must ensure that, in addition to the requirements set out above, it is indicated in the fall protection plan that:

(a) the roof work has been properly planned;
(b) the roof erectors are competent to carry out the work;
(c) no employee is permitted to work on roofs during inclement weather conditions or if any conditions are hazardous to the health and safety of the employee;
(d) all covers to openings and fragile material are of sufficient strength to withstand any imposed loads;
(e) suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
(f) suitable and sufficient guard-rails, barriers and toe-boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment.

Principal Contractor / Contractor - Competency Assessment
(Construction Regulation 7)

The Principal Contractor must be reasonably satisfied that the sub-contractors he intends to appoint also have the necessary competencies and resources to safely conduct the work they will be appointed for. This must be established at tender stage and before appointments are made.
In order to ensure this, the Principal Contractor must demonstrate to the Client that it has a suitable and sufficiently.

12. ADMINISTRATIVE CONTROLS AND THE OCCUPATIONAL HEALTH & SAFETY FILE

(Construction Regulation 7)

The Occupational Health and Safety File

The Principal Contractor will keep an Occupational Health and Safety File on site containing the following documents (where applicable) as a minimum:

- Accident/Incident Register. (Annexure 1 of the General Admin Regulations)
- Health and safety Representatives Inspections Register.
- Construction Vehicles & Mobile Plant Inspection.
- Daily Inspection of Vehicles.
- Plant and other Equipment by the Operator/Driver/User.
- Demolition Inspection Register.
- Electrical Installations, Equipment & Appliances. (Including Portable Electrical Tools)
- Excavations Inspection.
- Explosive Powered Tool Inspection/Maintenance/Issue/Returns Register. (incl. cartridges & nails)
- Fall Protection Inspection Register.
- First Aid Box Contents.
- Fire Equipment Inspection & Maintenance.
- False work Inspections.
- Hazardous Chemical Substances Record.
- Ladder Inspections.
- Lifting Equipment Register.
- Machinery Safety Inspection Register. (incl. machine guards, lock-outs etc.)
- Scaffolding Inspections.
- Stacking & Storage Inspection.
- Inspection of Structures.
- Inspection of Pressure Equipment.
- Welding Equipment Inspections.

- All other applicable records.
- An equipment inventory register, detailing all major items of equipment such as Construction Vehicles and Mobile Plant etc…

If any work is to be performed on Airside. The contractor must perform such work must provide ACSA with an airside safety plan.

On completion of the project or on completion of the contractors work each contractor must surrender the completed OHS file to the Principal Contractor for consolidation into one "Master File". **A Principal Contractor must** hand over a consolidated health and safety file to ACSA upon completion of the construction work and must, in addition to the documentation referred to in **paragraph 5** of this document include a record of all drawings, designs, materials used and other similar information concerning the completed structure. (These records will then be archived by ACSA for future reference purposes)

13. HEALTH AND SAFETY REPRESENTATIVES

The Principal Contractor must ensure that Health and Safety Representative(s) is/are elected and delegated in writing and necessary training has been provided by a competent person where there are more than 20 employees at the workplace. A proof of training certificate must be provided to ACSA. Health and Safety Representatives must conduct monthly inspections by completing a checklist developed by the Principal Contractor. Safety defects noted must be recorded and reported to the supervisor for remedial action. Health and Safety Representative Inspection findings must be made available to ACSA for reference for audits purposes.

Health and Safety Representatives and their reports must form part of the safety committee which must meet on a monthly basis.

The Principal Contractor must hold health and safety committee meetings on site. Minutes of such meetings and action taken by management must be kept on file and made available to ACSA for reference purposes. Members of the committee must receive proper training and a proof of such training must be made available.

The Committee must consider, at least, the Following Agenda:

- Opening & Welcome
- Present/ Apologies/ Absent
- Minutes of previous Meeting
- Matters Arising from the previous Minutes
- OH&S Reps Reports
- Incident Reports & Investigations
- Incident /Injury Statistics
- Other Matters
- Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
- Close/Next Meeting

The Principal Contractor must ensure that ACSA Safety Department is invited to such meetings. These meetings do not substitute for Principal Contractor's Site meetings.

14. HEALTH & SAFETY TRAINING

Environmental Health and Safety Induction

The Principal Contractor must conduct an induction training session prior commencement of construction work. An attendance register must be kept in the Principal Contractor's health and safety file.

For any construction work to be conducted on the Airside, Airside Induction training (AIT) must be attended by all persons entering who are to enter Airside and a course fee determined by ACSA must be paid by the Principal Contractor. A security permit to access airside must be issued on production of proof of attendance.

Induction Conducted by the Principal Contractor and Competent Person

A manual /copy of such training must be provided to ACSA for reference purposes. As determined by the risk assessment. The Principal Contractor must ensure that all employees under his/her control are trained by a competent person and a proof of such training is kept on file for reference.

Toolbox Talks

The Principal Contractor must ensure that employees attend a formal Toolbox Talk to be held at least once a week. Toolbox Talks must cover a wide variety of topics related to health and safety. An attendance register must be completed by employees who attended such talks. The register must indicate the topic covered presenter, date and signatures of employees attended. Records for Toolbox Talks must be kept in a health and safety file and be made available to ACSA for perusal.

First Aid Training

The Principal Contractor must appoint competent First Aider(s) in writing where more than 10 employees are employed. A letter of appointment must be kept on file for reference made available to ACSA Safety. Duly designated First Aider(s) must have attended training at an accredited institution prior commencement of construction work and a proof of certificate be submitted to ACSA for reference.

The Principal Contractor must ensure that the first aid box(s) is/are controlled by qualified First Aider(s) and kept fully stocked with necessary first aid contents related to the hazards and risks identified. A first aid box(s) must be accessible, and location of such box(s) is clearly displayed on site.

15. FIRE PREVENTION AND PROTECTION

The Principal Contractor must ensure that adequate fire equipment is provided in strategic places (that is, where there is a mobile distribution board, flammable liquids, pressure equipment, confined spaces, hot work). The Principal Contractor must ensure that such equipment is inspected by a competent person on a monthly basis and such inspections are recorded on a register. The Principal Contractor must ensure that all fire equipment is serviceable, and person(s) have been properly trained on how to use the equipment. A proof of such training must be provided prior commencement of construction work.

16. EMERGENCY PREPAREDNESS

The Principal Contractor must provide ACSA with an emergency plan and procedure which will include, but not limited to emergencies such as fire, bomb threat, civil unrest, medical treatment, environmental incidents, accidents to employees and other persons other than their employees.

Emergency procedure must be communicated to employees and a proof of such training must be kept on file for reference. A list of emergency contact numbers must be conspicuously displayed on site for ease reference. An evacuation plan must be displayed in strategic places.

In case of medical and/or fire emergency contact ACSA Fire & Rescue Services:

(021) 937 1211 or 1249

The Principal Contractor must provide ACSA Safety with a full record of any incidents which may occur on site.

17. INCIDENTS/ACCIDENTS REPORTING AND INVESTIGATION

The Principal Contractor must ensure that all incidents/accidents (this includes near miss, first aid cases and section 24 cases) are reported by employees immediately to the Construction Manager for further investigation and remedial action. The Principal Contractor must ensure that all OHS Act section 24 incidents/accidents are reported to the Department of Labour immediately and preliminary investigation is conducted by a competent person within seven days. If construction work will be finished within 3 days after occurrence, an investigation must be conducted before such construction work is completed. Proof of such investigation must be submitted to ACSA immediately or within 24 hours after investigation.

18. PERSONAL PROTECTIVE CLOTHING/EQUIPMENT

The Principal Contractor must ensure that personal protective equipment or clothing needs analysis is conducted and incorporated into the risk assessment. Records must be provided by the Principal Contractor prior to the commencement of construction work. The Principal Contractor must ensure that SABS approved personal protective equipment or clothing is provided to personnel. The Principal

Contractor must ensure that no personnel are allowed to work on site without necessary personal protective equipment or clothing. The Principal Contractor must ensure that PPE or Clothing is kept in good working order and clearly stipulate procedures to be followed when PPE or Clothing is lost or stolen, worn or damaged. ACSA will remove any person from the construction site who is working without necessary personal protective equipment and/or clothing. Worn or tattered personal protective clothing will not be permitted on airport premises

19. FALL PROTECTION (WORKING IN ELEVATED POSITIONS)

(Construction Regulation 10)

A pre-emptive Risk Assessment will be required for any work to be carried out above two metres from the ground or any floor level and will be classified as "Work in Elevated Positions".
As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing and using a full body harness that will be worn to prevent the person falling from the platform, ladder or other device utilised.

This safety harness will be, as far as is possible, secured to a point away from the edge over which the person might fall and the double lanyard must be of such a length that the person will not be able to move over the edge.
In addition, any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with guard rails at two different heights as prescribed in SABS 085' Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding

Workers working in elevated positions must be trained to do this safely and without risk. Proof of training must be maintained on the contractors site safety file. Medical certificates of fitness for all employees working in elevated positions must be available on site. This must be issued by an Occupational Health Practitioner.
Where work on roofs is carried out, the Risk Assessment must take into account the possibility of persons falling through fragile material, skylights, soffits and openings in the roof, steel support work trusses and purlins so designed as to support the roof structure.
The Risk Assessments shall place specific emphasis on the placing and handling of roofing materials such as Inverted Box Rib Sheeting (IBR sheeting) or similar materials, (including contingency safety measures), which when exposed to windy conditions represents a serious safety hazard.

20. RISK ASSESSMENT FOR CONSTRUCTION WORK

(Construction Regulation 9)

Every Contractor performing Construction work shall, before the commencement of any construction work and during such work, have a Risk Assessment performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the OH&S Plan.
Each activity must define individual tasks associated with that identified activity. These and all associated hazards must be identified and listed in the risk assessment. This ensures that critical tasks and associated hazards are not missed.

The Risk Assessment must include:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified
- A documented plan and applicable safe work procedures (SWP) to mitigate, reduce or control the risks and hazards that have been identified
- A monitoring plan and
- A review plan

A Contractor must ensure that:

- As far as is reasonably practicable ergonomic related hazards are analysed, evaluated, and addressed.
- All employees under his/her control are informed, instructed, and trained by a competent person regarding any hazards
- A Principal Contractor must ensure all Contractors are informed regarding any hazard as stipulated in the risk assessment before any work commences.

- Consult with health and safety committee on monitoring and review risk assessment on site.
- Ensure a copy of risk assessments is available for inspection.
- Review relevant risk assessments where changes are affected to the design or construction that result in a change to the risk profile or when an incident occurred.

N.B. A risk assessment will be performed for all unplanned work and submitted to ACSA for approval prior to work commencing.

21. STRUCTURES

(Construction Regulation 11)

The Contractor will ensure that in terms of Construction Regulation 11 the following is adhered to:

- That the structure on/in which works are to be performed has been inspected by a certified structural engineer declaring the structure to be safe for construction/demolition/renovations work processes.
- Steps are taken to ensure that no structure becomes unstable or poses a threat of collapse due to demolition and construction work being performed on it, or in the vicinity of it.
- No structure is overloaded to the extent where it becomes unsafe; if uncertainty arises then the structural engineer is to be consulted.
- He/she has received from the designer the following information:
- Information on known or anticipated hazards relating to the construction/demolition work and the relevant information required for the safe execution of the construction/demolition work.
- A geo-scientific report (where applicable).
- The loading the structure is designed to bear.
- The methods and sequence of the construction/demolition process.
- All drawings pertaining to the design are on site and available for inspection.

The structural engineer shall carry out inspections at appropriate and sufficient intervals of the construction work involving the design of the relevant structure to ensure compliance with the design and record the results of these inspections in writing.

22. EXCAVATIONS

(Construction Regulation 13)

The Principal Contractor must ensure excavation work is conducted under supervision of a competent person who has been appointed in writing. A letter of appointment must be provided to ACSA Safety prior commencement of work. A risk assessment outlining safe work procedures to be adhered to if excavation is more than 1.0m deep must be provided to ACSA prior commencement of work. The Principal Contractor must ensure that no person works in an excavation which is not adequately braced or shored.

The Principal Contractor must ensure that every excavation including bracing and shoring are inspected daily prior each shift starts, and such records are kept on site for reference.

The Principal Contractor must ensure that all precautionary measure as stipulated for confined spaces as stated in the General Safety Regulation of OHS Act 85/1993 are complied with when entering any excavation. The Principal Contractor must ensure that warning signs are conspicuously displayed where excavation work involves the use of explosives and a method statement developed by a competent person is provided to ACSA prior commencement.

The Principal Contractor must ensure that safe and convenient means of access is provided to every excavation when required. Such access must not be further than 6m from the point where any worker within the excavation is working.

The Principal Contractor must communicate, train and enforce safe work procedures pertaining to excavation work to his/her employees.

24. SCAFFOLDING

(Construction Regulation 16)

Access Scaffolding must be erected, used and maintained safely in accordance with Construction Regulation 16 and SA Bureau of Standards Code of Practice, SANS 10085/1 entitled, "The Design, Erection, and Use & Inspection of Access Scaffolding.
Detailed consideration must be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It must also be ensured that there is sufficient material available to erect the scaffolding properly.
Scaffolding may only be erected, altered or dismantled by a person who has the appropriate training and experience in this type of work or under the supervision of such a person
Specific attention must be given to the appointment of Scaffolding Inspectors and Scaffolding Erectors who shall not be the same person. The continuous inspection of scaffolding structures must be recorded on the applicable Scaffold register.
Tagging/Signs reflecting the status of the scaffold must be used and fixed to the structure at all times. (Safe to use / Scaffold not Safe)
On completion of the erection, the Supplier will inspect the structure and will ensure it is in sound working order and complies with all statutory regulations. The Supplier will then issue a Handover Certificate, Drawings, design and specifications shall be signed by a registered professional engineer.
An inspection of the completed scaffold shall also be inspected by the registered professional engineer for approval prior to use. Should any additional load i.e., a hoist or advertising banners be added to the scaffold at a later stage, the professional engineer must approve the modification.

25. CRANES

(Construction Regulation 22)

A Crane permit must be obtained from ACSA and submitted before erection of crane.
A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used—

(a) they are designed and erected under the supervision of a competent person;
(b) a relevant risk assessment and method statement are developed and applied;
(c) the effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
(d) the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
(e) the tower crane operators are competent to carry out the work safely; and
(f) the tower crane operators have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3.

26. LIFTING EQUIPMENT, TACKLE, MATERIAL HOIST AND CRANES

The Principal Contractor must ensure that all lifting equipment and tackle are inspected before use and a monthly register is completed by a competent person. Proof of such inspections must be recorded and kept on file for reference. The Principal Contractor must ensure that a safe working load is conspicuously displayed on lifting equipment and tackle and service certificate is provided prior commencement of work. The Principal Contractor must ensure operators are properly trained on how to operate the above mentioned equipment and a proof of competency is provided prior commencement of work.

The Principal Contractor must provide information on procedures to be followed in the case of:

(a) Malfunctioning of equipment; and
(b) Discovery of a suspected defect in the equipment

The Principal Contractor must ensure that safety measures stipulated in Driven Machinery Regulation and Construction Regulation with regard to above equipment are adhered to at all times.

27. CONSTRUCTION VEHICLES & MOBILE PLANT

(Construction Regulation 13)

Construction Vehicles and Mobile Plant may be inspected by ACSA prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHS Act and Regulations.
Construction Vehicles and Mobile Plant (CV & MP) to be:

- of acceptable design and construction
- maintained in good working order
- used in accordance with their design and intention for which they were designed
- Operated/driven by trained, licensed competent and authorised operators/drivers. No unauthorised persons to be allowed to drive or operate CV & MP
- Operators and drivers of CV & MP must be in possession of a valid medical certificate declaring the operator/driver physically and psychologically fit to operate or drive CV & MP.
- fitted with adequate signalling devices to make movement safe including reversing
- excavations and other openings must be provided with sufficient barriers to prevent CV & MP from falling into same
- Provided with roll-over protection, appropriate seat fitted which shall be used during CV & MP operations.
- inspected daily before start-up by the driver/operator/user and the findings recorded in a register/logbook
- CV & MP to be fitted with two head and two taillights whilst operating under poor visibility conditions, in addition they shall be equipped with 'hazard warning' lights, which must be used whenever the CV & MP is on site.
- No loose tools, material etc. is allowed in the driver/operator's compartment/cabin nor in the compartment in which any other persons are transported
- CV & MP used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported
- Operators to be issued with Personal Protective Equipment as required and identified by the Risk Assessments
- Only licensed and road worthy vehicles will be allowed on the public roads

No person may ride on a CV & MP except in a safe place provided by the manufacturer for this purpose
The construction site must be organized to facilitate the movement of CV & MP so that pedestrians and other vehicles are not endangered. Traffic routes are to be suitable, sufficient in number and adequately demarcated
CV & MP left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights reflectors or barricades to prevent moving traffic coming into contact with the parked CV & MP.
In addition, CV & MP left unattended after hours must be parked with all buckets, booms etc. fully lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely
Workers employed adjacent to, or on public roads must wear reflective safety vests
All CV & MP inspection records must be kept in the OH&S File.

28. HOUSEKEEPING AND GENERAL SAFEGUARDING ON CONSTRUCTION SITES

(Construction Regulation 27)

The Principal Contractor must ensure that suitable housekeeping is continuously implemented on each construction site, including—

(a) the proper storage of materials and equipment;
(b) the removal of scrap, waste and debris at appropriate intervals;

(c) ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
(d) ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
(e) ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
(f) ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

The Principal Contractor must ensure that safety precautionary measures stipulated in Environmental Regulations for Workplaces and Construction Regulations and Construction Environmental Specification are adhered to at all times.

29. STACKING AND STORAGE ON CONSTRUCTION SITES

(Construction Regulation 28)

The Principal Contractor must ensure contractor must ensure that:

(a) a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
(b) adequate storage areas are provided;
(c) there are demarcated storage areas; and
(d) storage areas are kept neat and under control a competent person is appointed in writing with a duty of supervising all stacking and storage on a construction work or site. A proof of such appointment must be provided prior commencement of construction work. The Principal Contractor must ensure that stacking is conducted under supervision and good housekeeping is maintained at all times.

30. FIRE PRECAUTIONS ON CONSTRUCTION SITES

(Construction Regulation 29)

The Principal Contractor must ensure that:

(a) all appropriate measures are taken to avoid the risk of fire;
(b) sufficient and suitable storage is provided for flammable liquids, solids and gases;
(c) smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
(d) in confined spaces and other places in which flammable gases, vapours or dust can cause danger—
    (i) only suitably protected electrical installations and equipment, including portable lights, are used;
    (ii) there are no flames or similar means of ignition;
    (iii) there are conspicuous notices prohibiting smoking;
    (iv) oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
    (v) adequate ventilation is provided;
    (e) combustible materials do not accumulate on the construction site;
    (f) welding, flame cutting, and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
    (g) suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
    (h) the fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
    (i) a sufficient number of workers are trained in the use of fire- extinguishing equipment;

(j) where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
(k) the means of escape is kept clear at all times;
(l) there is an effective evacuation plan providing for all—
(i) persons to be evacuated speedily without panic;
(ii) persons to be accounted for; and
(iii) plant and processes to be shut down; and
(m) a siren is installed and sounded in the event of a fire.

31. CONSTRUCTION EMPLOYEES' FACILITIES

(Construction Regulation 30)

A Contractor must provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

(a) Shower facilities after consultation with the employees or employees' representatives, or at least one shower facility for every 15 persons;
(b) at least one sanitary facility for each sex and for every 30 workers;
(c) changing facilities for each sex; and
(d) sheltered eating areas.

A Contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

32. LADDERS

The Principal Contractor must ensure that all ladders are numbered, inspected before use and monthly inspections are recorded in a register. The Principal Contractor must ensure that a competent person who carries the above inspections is appointed in writing.

33. PRESSURE EQUIPMENT

The Principal Contractor must ensure that pressure equipment is identified, numbered and entered in a register. Furthermore he/she must ensure that inspections are carried out and certificates of testing are available and kept on file as per the Regulations.

34. EMPLOYEES EXPOSED TO EXCESSIVE NOISE

The Principal Contractor must ensure that all employees exposed to excessive noise, equal or above 85 dB(A), have undergone a baseline audiometric test prior commencement of construction work and SABS approved ear protection is provided and worn at all times.

35. PUBLIC SAFETY AND SECURITY

The Principal Contractor must ensure that notices and signs are conspicuously displayed at the entrance and along the perimeter fence indicating "No Unauthorized Entry", "Visitors to report to office", "helmet and safety shoes" etc.

Health and safety signage must be well maintained throughout the project. This must entail cleaning, inspection and replacement of missing or damaged signage.

Furthermore, the Principal Contractor must ensure that:

a) Nets, canopies, fans etc. are provided to protect the public passing or entering the site
b) A security guard is provided where necessary and provided with a way of communication and an access control measures or register is in place
c) All visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site.

36. HOT WORK

The Principal Contractor must ensure that ACSA Fire & Rescue Department is notified of any hot work to be conducted during construction work. A hot work permit accompanied with a gas free certificate must be issued to the relevant Principal Contractor by ACSA Fire & Rescue Department when satisfied

that the area is safe and that the Principal Contractor understands the procedure. The Principal Contractor must ensure that a hot work procedure is adhered to at all times by his/her employees.

37. HIRED PLANT AND MACHINERY

The Principal Contractor must ensure that any hired plant and/or machinery brought to site is inspected by a competent person before use and records confirming that it is safe for use are provided prior usage of such equipment. Such plant or machinery complies at all times with the requirements of the Occupational Health & Safety Act.

The Principal Contractor must ensure that hired operators receive induction prior commencement of work and that said hired operators have proof of competency.

The Principal Contractor must provide information on procedures to be followed in the case of:

(a) Malfunctioning of equipment; and
(b) Discovery of a suspected defect in the equipment

38. EDGE PROTECTION AND PENETRATION

The Principal Contractor must ensure that all exposed edges and floor openings are guarded and demarcated at all times until permanent protection has been erected. Guardrails used for edge protection must be 500mm and 900mm apart (double railing) above the platform/ floor surface.

The Principal Contractors fall protection plan must include the procedure to be followed regarding the management of edge protection and penetration.

39. CONFINED SPACE ENTRY

The Principal Contractor must ensure that all necessary health and safety provisions prescribed in the General Safety Regulations are complied with when entering confined spaces.

40. LIQUOR, DRUGS, DANGEROUS WEAPONS, FIREARMS

The Principal Contractor must ensure that no person is allowed on site that appears to be under the influence of intoxicating liquor or drugs.

The Principal Contractor must encourage his/her workforce to disclose the medication that poses a health and safety threat towards his/her fellow employees. No person must be allowed to enter the site and work if the side effects of such medication do constitute a threat to the health or safety of the person concerned or others at such workplace.

No dangerous weapons or firearms allowed on the construction site.

41. INTERNAL/EXTERNAL AUDITS

The Principal Contractor must conduct monthly safety, health and environment audits and such records must be kept on site. The Principal Contractor must ensure that corrective measures are taken to ensure compliance.

ACSA must conduct monthly audits and defects noted must be reported to the relevant Principal Contractor for remedial action. Inspections must be conducted by ACSA and non-conformances noted must be recorded and provided to the relevant Principal Contractor for remedial action. ACSA must stop any Principal Contractor from executing any construction work which is not in accordance with the health and safety plan.

The Principal Contractor must ensure that all necessary documents stipulated in this document are kept on the health and safety file and made available when requested.

42. PENALTIES

Penalties will be imposed by ACSA on Principal Contractors who are found to be infringing these specifications, legislation and safety plans.

The Principal Contractor will be advised in writing of the nature of the infringement and the amount therefor. The Principal Contractor must determine how to recover the fine from the relevant employee and/or sub-contractor. The Principal Contractor must also take the necessary steps (e.g., training) to prevent a recurrence of the infringement and must advise ACSA accordingly. the Principal Contractor is also advised that the imposition of penalties does not replace any legal proceedings.

Penalties will be between R200 and R20 000, depending upon the severity of the infringement. The decision on how much to impose will be made by the ACSA SHE Representative and will be final. In

addition to the penalties, the Principal Contractor must be required to make good any damage caused as a result of the infringement at his/her own expense.
The preliminary list below outlines typical infringements against which ACSA may raise penalties; however, this list must not be construed as final:

- Failure to keep a copy of OHS ACT on site.
- Failure to maintain an up-to-date letter of good standing with the Compensation Commissioner / FEM.
- Working on site without attending Safety Induction Training.
- Failure to conduct Safety Induction for personnel and visitors on site.
- Failure to issue and wear Personal Protective Clothing and Equipment.
- Failure to fully stock first aid box in accordance with the risks identified.
- Failure to disclose or report first aid cases and /or minor/major/fatalities as prescribed by the OHS ACT.
- Failure to adhere to written safe work procedure as stipulated in the Hazard Identification and Risk Assessment and safety plan.
- Failure to maintain records and registers as per the OHS Act of 1993 and its regulations.
- Failure to conduct audits and inspections as required by legislation.
- Keeping un-serviced fire equipment on site.
- Failure to make use of ablution facilities.
- Failure to remove personnel on site who appears to be under the influence of intoxicating liquor or drugs.
- Failure to close out previously raised non-conformances.
- Failure to make and update legislative appointments.
- Failure to adhere to the OHS Act of 1993 and its regulations.

I, _____ (name & surname) of _____(company)
Upon receipt of this specification, agree and acknowledge ACSA's right to impose penalties should I or any of my employees or contractors fail to comply with these conditions.

Signed: _____

On this date: _____ (dd/mm/yyyy)

At: _____ (Airport Name)

C4.5 Baseline HIRA - Risk Assessment

Baseline Risk Assessment	
Project Name:	FUEL PIT VALVES AND METERS REPLACEMENT
Document Number: HIRA 1	Revision Number: 001

Risk Severity Definition	Description: Consequence (can lead to)…	Examples of what to look out for…
Category A Catastrophic	One or more multiple deaths and complete loss or destruction of equipment	A major accident
Category B Hazardous	Serious injuries or major damage to equipment	Large reduction in safety margins, physical distress or workload such that the operators cannot be relied upon to perform their tasks accurately or completely
Category C Major	Minor injuries or minor equipment damage	A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of conditions impairing their efficiency
Category D Minor	Incidents	Operating limitations are breached. Procedures are not used correctly
Category E Negligible	Negligible or Inconvenience	Few consequences. No safety consequences. Nuisance

C4.6 ACSA Generic Hazard Assessment

Likelihood Probability	Description	Examples of what to look out for…
Category 1	Extremely Improbable (Rare)	Almost inconceivable that the event shall occur
Category 2	Improbable (Seldom)	Very unlikely that the event shall occur. It is not known that it has ever occurred before
Category 3	Remote (Unlikely)	Unlikely but could possibly occur. Has occurred rarely.
Category 4	Occasional	Likely to occur sometimes. Has occurred infrequently.
Category 5	Frequent	Likely to occur many times or regularly. Has occurred frequently or regularly

		Catas-trophic	Hazardous	Major	Minor	Negligible
		A	B	C	D	E
Frequent	5	5A	5B	5C	5D	5E
Occasional	4	4A	4B	4C	4D	4E
Remote	3	3A	3B	3C	3D	3E
Improbable	2	2A	2B	2C	2D	2E
Extremely Improbable	1	1A	1B	1C	1D	1E

Annexure C3 – Generic Hazard assessment

Generic Hazard	Specific component of Hazard	Hazard related consequence	Existing defences to control risk	Safety Risk Index
Site establishment	Delivering of containers and materials; increased vehicle movements and location of services	Operational disruptions, incidents and service disruptions	Site plan location requires prior approval, services to be identified by ACSA representatives and drivers to be competent and vigilant of other road users. Vehicle inspections are to be conducted daily	2D
Site Access	Access is to be controlled and movement of vehicles and staff are to be monitored to reduce impact on operations	Injuries to Airport users, traffic build up, operational delays, vehicle incidents	Site is to be access controlled. All visitors to site are to report to the site office. Entrance to site camp is to be kept clean, swept after truck deliveries to minimize impact to operations.	2D
Persons on airside	Accidents and injuries	Injury to persons/Fatality	All staff wishing to work on the Airside are to go for Airside induction training. These staff members are to have valid Permits with them at all times. Personal protective equipment required for Airside includes but is not limited to high visibility jackets (as per the procedure, hearing protection, safety shoes & hard hats (if required). An airside safety plan must be submitted before commencement of work.	3A

Vehicles on airside	Accidents and injuries	Damage to aircraft/vehicles/property/persons	All vehicles operating on the Airside are to be fitted with a strobe light, appropriate signage in the form of a prefix, have the necessary vehicle permit in place, to be fitted with a fire extinguisher and is to be serviceable. Vehicles are to be checked by Airside Safety prior to be granted Airside access	4A
Driving on airside	Incidents	Damage to aircraft/ vehicles/property/ persons	Airside induction is required for all persons entering the Airside. For persons wishing to drive on the Airside Service Road an AVOP 2 permit is required. Where work is to be conducted on the Airfield, then contractors are required to be under escorts or have undergone Radio Licence training and be in the possession of an AVOP 3 permit The speed limit on the Apron Service Roads is 30km/h, 15km/h at the back of stand and 60km/h on the Perimeter Road. During period of Low Visibility (LVP) will be affected and no vehicular movements are allowed on the Airfield. Low visibility procedures will be in place	4A
Driving on runways and taxiways without permission	Incursion (include definition)	Collision with aircraft/property damage or fatality/ies	Runway and taxiway markings are indicated as per ICAO Annex 14. Permission is required from Air Traffic Control when crossing runways and taxiways. Signage indicating movement areas are painted on the ground or by means of illuminated signage boxes. Only persons in possession of a valid Airside Vehicle Operators Permit with the necessary radio licence (Partac training) will be permitted to drive in restricted areas. Vehicles under escort must follow at reasonable distance.	3A

Noise	Health Risks	Noise induced hearing loss	Baseline and annual audiograms are to be conducted. Contractors are to implement a hearing conservation programme and issue staff with hearing protection and provide the necessary training in this regard. Contractors to identify noisy operations in passenger areas and are to conduct noise generating operations at off peak times were possible or if unavoidable with ACSA's Project Leaders written permission.	3B
Jet blast	Potential injuries and property	Damage to vehicles/property/persons	Signage warning against jetblast is installed at high risk areas. Risks associated with jetblast are covered during Airside Induction Training. Caution to be taken around aircraft when the anti-collision lights are activated in the Apron bays. 75 meter clearance behind aircraft to be observed to prevent jetblast. Contractors to be aware of aircraft movements	4C
Perimeter fence breach	Security risk	National Key Point Violation	Access and egress points are strictly enforced. Contractors are only to use the entry points as provided by the ACSA Project Leader. No materials are to be stored within 3meter of the perimeter fence.	3B
Weather	Adverse weather conditions	Damage to aircraft/vehicles/equipment	Weather warnings are issued by the Airside Safety Department as and when required. All equipment on the Airside is to be secured	4A
Construction works	Foreign Object Debris (FOD)	Ingestion into aircraft engine	Airside induction is required for all staff working on the Airside, FOD bins are to be used for any FOD found lying on the ground. All waste to be secured to prevent it from becoming airborne (refer to Environmental Terms and Conditions)	4B

Construction works	Storage of hazardous chemicals substances	Contamination/fire/ injury to persons/ environmental impact	ACSA's Environmental terms and conditions are to be adhered to. All relevant legislation and bylaws are to be adhered to. All necessary permits are to be applied for by the contractor such as transport permits, possession permits and flammable certificates. ACSA Environment and Fire and Rescue to be notified where a spill occurs.	4B
Construction works	Waste	Attracts rodents and birds which leads to bird strikes and adds to FOD	Waste management to be implemented in line with ACSA's Environmental Terms and Conditions	4B
Construction works	Spillages (fuels/oils/hydraulics/chemicals/ human waste)	Contamination/Pollution /injury to persons/adverse health effects	ACSA's Environmental terms and conditions and applicable legislative controls are to be adhered to. ACSA Environment and Fire and Rescue to be notified where a spill occurs	4B
Construction works	Dust	Damage to aircraft//injury to persons/adverse health effects/	Dust suppression measures are to be implemented and PPE used where required	4A
Construction works/ Trenching	Damage to underground services. Interruption of critical services	Electrocution, loss of critical services, damage to property, major injuries, aircraft diversions	Consult as-built plans. Scan area before trenching. Trenching to be done under competent supervision.	4A
Delivery of materials	Falling materials, stones, or sand	Vehicle/pedestrian accidents	Materials are to be delivered within specified time frames, flagman to be utilised during deliveries, load limitations to be observed, netting is to be used, contractors to clean road after deliveries	4E

Lack of signage – warning signs	Injuries and accidents	Injuries and accidents	Contractors to install sufficient demarcations around construction sites along with the necessary warning signs and beacon lights (refer to Construction Regulations and Traffic Act) No signs are to be removed without prior permission and notification. Temporary way finding signage is required if signage has been disturbed	2D
Road crossing Central Boulevard	Not using the tunnel for crossing	Vehicle and pedestrian accidents	Contractor staff are to cross the Boulevard via the North or South tunnels	4B
Waste management	Environmental impact	Illegal dumping	Temporary laydown areas to be identified and no illegal dumping is permitted.	3C
Trolleys	Damaging trolleys through misuse	Injuries and property damage	Contractors to provide their own trolleys. ACSA's trolleys are for passenger use only	5D
Fire equipment	Use and abuse of fire equipment	Injuries and property damage	Fire equipment is only to be used during emergencies. Contractors to provide their own fire equipment. No materials to be stored in ACSA fire cabinets. Emergency exits are to be kept clear at all times	2B
Unattended bags	Security risk	injuries/fatality to Airport users/stakeholders/ACSA employees. Bomb threat-damage to property, vehicle. Operational disruptions	Contractors are not permitted to leave bags unattended as they will be removed and will be handed to SAPS	5C
Speed limits	Car accidents	Injuries and vehicle damage	Speed limits on the Central Boulevard and Elevated Road are 40km/h, exiting the road networks is 50km/h, Tower Road is 50km/h and Freight Road is 50km/h. Speed humps are installed along Tower Road and Freight Road to reduce speeding	3C

Deliveries	Elevated Road	Disrupt traffic flow and passenger movements	No trucks allowed deliveries to be done via North or South Delivery Yards, delivery notes are required, and delivery times are to be specified.	2C
Overhead works	Falling items	Injuries, vehicles, property damage	Fall protection plan required as per the Construction Regulations 2014.	5C
General housekeeping	Damage to escalators	Injuries, property damages	Escalators are not used to transport heavy items in the Parkade	4C

C4.7 – ACSA Service & Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048

The following Environmental Terms and Conditions shall be strictly adhered to by all contractors when conducting works for ACSA. ACSA shall audit contractor activities, products and services on an ad hoc basis to ensure compliance to these environmental conditions. Any pollution clean-up costs shall be borne by the contractor.

ISSUE	REQUIREMENT
Environmental Policy	ACSA's Environmental Policy shall be communicated, comprehended and implemented by all ACSA appointed contractor staff (see attached Environmental Policy).
Stormwater, Soil and Groundwater Pollution	• No solid or liquid material may be permitted to contaminate or potentially contaminate stormwater, soil or groundwater resources. • Any pollution that risks contamination of these resources must be cleaned-up immediately. Spills must be reported to ACSA immediately. Contractors shall supply their own suitable clean-up materials where required. • Washing, maintenance and refuelling of equipment shall only be allowed in designated service areas on ACSA property. It is the contractor's responsibility to determine the location of these areas. • No leaking equipment or vehicles shall be permitted on the airport.
Air Pollution	• Dust: Dust resulting from work activities that could cause a nuisance to employees, or the public shall be kept to a minimum. • Odours and emissions: All practical measures shall be taken to reduce unpleasant odours and emissions generated from work related activities. • Fires: No open fires shall be permitted on site.
Noise Pollution	• All reasonable measures shall be taken to minimise noise generated on site as a result of work operations. • The Contractor shall comply with the applicable regulations with regard to noise.
Waste Management	• Waste shall be separated as general or hazardous waste. • General and hazardous waste shall be disposed of appropriately at a permitted landfill site should recycling or re-use of waste is not feasible. • Under no circumstances shall solid or liquid waste be dumped, buried or burnt. • Contractors shall maintain a tidy, litter free environment at all times in their work area. • Contractors must keep on file: 1. The name of the contracting waste company 2. Waste disposal site used 3. Monthly reports on quantities – separated into general, hazardous, and recycled 4. Maintained file of all Waste Manifest Documents and Certificates of Safe Disposal 5. Copy of waste permit for disposal site This information must be available during audits and inspections.
Handling & Storage of Hazardous Chemical Substances (HCS)	• All HCS shall be clearly labelled, stored and handled in accordance with Materials Safety Data Sheets. • Materials Safety Data Sheets shall be stored with all HCS. • All spillages of HCS must be cleaned-up immediately and disposed of as hazardous waste. (HCS spillages must be reported to ACSA immediately). • All contractors shall be adequately informed with regards to the handling and storage of hazardous substances. • Contractors shall comply with all relevant national, regional and local legislation with regard to the transport, storage, use and disposal of hazardous substances.
Water and Energy Consumption	ACSA promotes the conservation of water and energy resources. The contractor shall identify and manage those work activities that may result in water and energy wastage.

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Training & Awareness	The conditions outlined in this permit shall be communicated to all contractors and their employees prior to commencing works at the airport.

Penalties
Penalties shall be imposed by ACSA on Contractors who are found to be infringing these requirements and/or legislation. The Contractor shall be advised in writing of the nature of the infringement and the amount of the penalty. The Contractor shall take the necessary steps (e.g., training/remediation) to prevent a recurrence of the infringement and shall advise ACSA accordingly.

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

Penalties shall be between R200 and R20 000, depending upon the severity of the infringement. The decision on how much to impose will be made by ACSA's Airport Environmental Management Representative in consultation with the Airport Manager or his/her designate 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/her own expense.

I, _____ (name & surname) of _____ (company)

agree to the above conditions and acknowledge ACSA's right to impose penalties should I or any of my employees or sub-contractors fail to comply with these conditions.

Signed: _____ on this date: _____ (dd/mm/yyyy)
at: _____ (airport name).

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C4.8 ACSA Construction Environmental Management Plan – EMS 050

1. Background

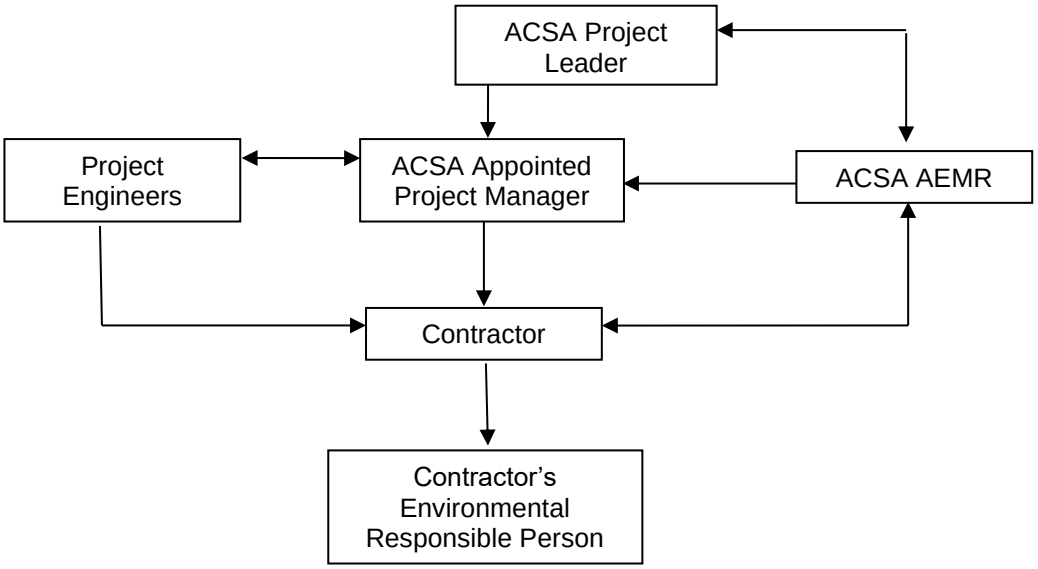
The purpose of this Environmental Management Plan (EMP) is to co-ordinate mitigation, rehabilitation, and monitoring measures of construction projects at ACSA airports such that environmental pollution and risks are minimized as far as possible.

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 Employer Project Leader

This is an employee of the Employer 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-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 ablution 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 wastewater

Wastewater from any other ablution 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 weekends 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 (e.g., cement washings, wastewater 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 weekends 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, 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 & 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 Stabilization 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 Low service damages

5.3 Low service damages 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, landowners and/or members of the public may institute against the Contractor.

5.4 Low service damages 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.

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

C4.9 Environmental Management System Policy

AIRPORTS COMPANY
SOUTH AFRICA

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED
ENVIRONMENTAL MANAGEMENT POLICY STATEMENT

Airports Company South Africa SOC Limited (ACSA), as a world-class airport operator, acknowledges that airport activities and operations may have diverse impacts on the environment. It therefore accepts its stewardship role of responsible care for the environment in order to reduce its environmental impact. Consequently, ACSA commits to implementing and maintaining an Environmental Management System.

Airports Company South Africa SOC Limited (The Group) is committed to:

- Maintain an Environmental Management System based on the requirements of ISO 14001.
- Conduct regular audits of the system to ensure its adequacy and effectiveness.
- Monitor and measure significant environmental aspects and impacts of airport activities and operations, and provide a framework for the setting and reviewing of environmental objectives and targets.
- Ensure employees, operators, tenants, service providers, contractors and supply chain that fall within the scope of the Environmental Management System are aware of the environmental aspects and impacts associated with their activities and operations, and of the requirements of the Environmental Management System.
- Report its environmental performance indicators in the integrated annual report.
- Continually improve environmental performance.
- Seek opportunities to reduce the impact of aircraft noise by engaging with industry stakeholders.
- Monitor aircraft noise at Cape Town International Airport, King Shaka International Airport and O R Tambo International Airport.
- Actively seeking out opportunities to reduce energy consumption from non-renewable energy sources.
- Measure the carbon footprint at Bram Fischer, Cape Town, King Shaka, O R Tambo and Port Elizabeth International Airports, as well as George Airport, while actively seeking out opportunities to reduce its overall carbon footprint.
- Monitor air quality at Cape Town International Airport, King Shaka International Airport and O R Tambo International Airport.
- Actively seek opportunities to reduce water consumption.
- Avoid the pollution of storm water and/or groundwater as a result of airport operations.
- Ensure that all waste is minimised, or otherwise reduced, re-used and/or recycled.
- Conserve biodiversity where feasible on its property.
- Collaborating with and engaging surrounding communities to seek opportunities to minimise the environmental impact of airport operations on the environment.
- Comply with relevant environmental legislation, associated regulations and other applicable requirements.
- Where Airports Company South Africa SOC Limited does not directly control the impacts at the Corporate Office or at airports, the Group shall work in partnership with operators, contractors, tenants, service providers and supply chain management to improve performance.

The Environmental policy is applicable to Airports Company South Africa SOC Limited infrastructure, and the geographical areas within which the organisation operates its aeronautical and non-aeronautical business. This includes its employees, stakeholders, service providers, and contractors.

The Group's managers and staff acknowledge that the implementation of this Environmental Policy is their responsibility and are committed to it. This policy statement shall be reviewed by Management every three (3) years and made available to any interested parties upon request.

Signed: 

Date: 05/03/2021
Issue No: 11

Chief Executive Officer: Airports Company South Africa SOC Limited.

acsC4.10 Environmental Management System

1. Scope

This procedure is intended for all ACSA Service and Maintenance Contractors whose activities, products and services may produce a negative impact on the environment at ACSA Operated Airports.

2. Objective

To incorporate all service and maintenance contractors into ACSA's Environmental Management System (EMS), to align activities, products, and services with the EMS and ACSA's Environmental Policy.

3. Definitions and Abbreviations

ACSA
Airports Company South Africa SOC Ltd

ACSA AEMR
ACSA Airport Environmental Management Representative

ARFFS
Aerodrome Rescue and Fire Fighting Services

HCS
Handling & Storage of Hazardous Chemical Substances

SHE
Safety, Health, and Environment

Service & Maintenance Contractor
An ACSA appointed service or maintenance provider assigned to carry out repairs, upgrades, installations, and on-going maintenance of airport infrastructure. Service contractors (e.g., cleansing, landscaping, pest removal, hygiene, sanitation) or maintenance contractors (e.g., electricians, plumbers, mechanics) may have long-term contracts or provide services on an ad-hoc basis.

4. Procedure General

4.1 All ACSA departments shall contact the airport's ACSA AEMR prior to appointing a service or maintenance contractor on the airport.

4.1.1 All new or renewed service and maintenance contractors shall be screened for significant environmental aspects by the airport's ACSA AEMR. Refer ACSA EMS Department Determining Significant Environmental Aspects Procedure - T010 001M. Any new significant environmental aspects shall be documented in the aspects register, and control measures implemented accordingly.

4.2 The ACSA AEMR shall decide whether or not the contractor requires formal environmental induction training based on Point 4.1.1 above. If training is required, it

shall be conducted by the relevant contractor's responsible person/supervisor prior to commencing work on the airport.

4.3 The ACSA Department responsible for appointing service or maintenance contractors shall append the ACSA Service and Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048 permit to tender documents, contract documents, service level agreements or bill/schedule of quantities specifications. This will allow contractors to accommodate any unforeseen costs, to minimise environmental risk, or ensure compliance. Prior to commencement of works, contractors shall sign this permit, a copy of which shall be kept by both the responsible ACSA Department and the contractor.

4.4 The contractor's representative shall ensure the conditions set out in the ACSA Service and Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048, along with ACSA's Environmental Management System Policy are communicated to, comprehended and implemented by all contractor staff.

4.5 All ACSA Departments making use of contractors shall keep an up-to-date register of contractors on site. This register shall include the name of the contracting company, the site supervisor/manager and his/her contact number, the nature of works and work area, the date of commencement and expected completion of the work, and whether the ACSA Service and Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048 permit has been duly signed. In addition, contractor tender documents, contract documents, service level agreements or bill/schedule of quantities specifications shall be available for audit/inspection by the ACSA AEMR.

4.6 Contractor activities shall be audited at the discretion of the ACSA AEMR depending on the nature of risks and environmental aspect significance.

5. Roles and Responsibilities

Issues	Responsible Person	Alternate
Has overall responsibility for adherence to this Operational Procedure	ACSA General Manager or Airport Manager	Relevant designated person shall assume responsibility
Has responsibility for adherence and implementation of this Operational Procedure	ACSA Safety Manager/ ACSA ARFFS Manager/ ACSA HOD: SHE/ ACSA AEMR	Relevant designated person shall assume responsibility

6. Verification

This procedure shall be verified in accordance with ACSA Verification Policy, Procedure and Working Instruction - Z001 002M.

7. Non Conformance

Any deviation from this procedure shall be identified and registered with corrective and preventative measures for continual improvement in accordance with the ACSA Non Conformance Policy, Procedure and Working Instruction - Z001 001M.

8. References

ACSA Non Conformance Policy, Procedure and Working Instruction - Z001 001M

ACSA Verification Policy, Procedure and Working Instruction - Z001 002M

ACSA Change Control Policy, Procedure and Working Instruction - Z001 003M

ACSA Document Control Procedure - Z001 006M

ACSA Record Keeping Requirements Procedure - Z001 008M

ACSA Airfield Standard Operating Procedure Manual

9. Change Control

This procedure shall only be changed with the authorisation of the ACSA Group Executive: Airport Operations and in accordance with ACSA Change Control Policy, Procedure and Working Instruction - Z001 003M.

10. Records

Record Name	Storage Location	Record Number	Responsible Person	Retention Time
ACSA Service & Maintenance Contractors Environmental Terms and Conditions to Commence Work	ACSA Safety Department	EMS 048	ACSA AEMR	Five (5) years
ACSA Service and Maintenance Contractors Procedure	ACSA Master Document Control Office	T050 009M	ACSA Senior Administrator: Policies and Procedures	Five (5) years

11. Endorsement (See ACSA Master File in Document Control Office, Corporate)

Construction and Material

The construction method will match that of the Permanent hoarding on the public side only and no finishes on the construction side.

No insulation for this type of hoarding will be required.

C4.12 Contractors' Airside Safety Specifications

INDEX

Introduction

The airport precinct is generally divided into two, the landside (i.e., terminal buildings, car parks, the road system etc.) and the Airside (i.e., Apron, Runways, Taxiways and surrounding grounds.) Construction, maintenance, and repair work is carried out frequently on the airside, both by day and by night. Some of the work might be minor in nature lasting only a few hours or a few days, involving only a few workers with one or two vehicles/equipment. Some of the work might be major involving longer periods with a large staff complement and many vehicles and/or equipment. Whatever the work to be conducted, there are certain basic safety and operating standards that must be maintained. These specifications pertain to all work of a construction nature as defined in the Construction Regulations of 2014, as amended, and to general maintenance that is conducted on the airside.

Work done on or near an active airport is subject to several special requirements and conditions to ensure the safe operation of the airport at all times. Since the work is to be carried out under airport operational conditions, various limitations and requirements are to be taken cognisance of during the preparation of the tender and the construction programme. These limitations will not entitle the contractor to claim for extension of time or standing time.

This document highlights hazards, limitations, and requirements for conducting work on the airside but it is not exhaustive as work processes and conditions differ depended on the nature of work. Other requirements will be highlighted as the work processes and conditions unfold and get better understood.

1. Hazards on the airside

The airport airside environment has very high inherent risks brought about mainly by aircraft operating at high speed and the high volume of fuel carried by aircraft. One might liken aircraft to mobile major hazard installations. The major hazards on the airside are: -

I. Moving aircraft
II. Combustible material
III. Aircraft noise
IV. Moving aircraft ground support equipment (GSE)
V. Pedestrians

Where a safety breach occurs, ACSA reserves the rights to stop work and/or withdraw the access and / or driving permits of the offenders. Work will only proceed when the safety breach has been resolved.

2. Contractor's responsibilities

The responsibilities of the contractor are as specified in the OHS ACT of 1993 as an employer and in the Construction Regulation of 2014 as a main Contractor or a sub-contractor as the case may be.

3. ACSA's responsibilities

The responsibilities of ACSA (the Airport Manager or his/her designated representative) as the client are as specified in the Construction Regulations of 2014.

The Airport Manager or his/her designated representative will issue the necessary application forms to those who apply to the airport management for an Airside Vehicle Permit and/or Airport Security Permit and will decide, on receipt of the completed forms, whether or not to issue permits. Permits shall be issued in terms of ACSA Policy and Procedures which are available on the ACSA website or from the ACSA Project Manager.

The Airport Manager or his/her designated representative may at any time withdraw or suspend an Airside Vehicle Operators Permit (AVOP) or an Airside Security Permit and is not obliged to give reasons for the withdrawal.

4. Airside Induction Training and Airside Vehicle Operators Permit training

Before access to the Airside is permitted, the contractor and employees are required to attend Airside Safety Induction Training in accordance with ACSA Policy and Procedure no B 100001M.

Before driving on the Airside is permitted drivers are required to attend Airside Vehicle Operators Permit (AVOP) training in accordance with ACSA Policy and Procedure No B150001M.

The above training is at a fee which the contractor must verify with the Airside Safety Administrator, telephone 011 921 6635 or the ACSA Project Manager.

5. Control of personnel and vehicles

5.1. Coordination of activities on the airfield and aprons

The Airside has been divided into two, the airfield and the aprons. The airfield is all the areas consisting of runways, taxiways, and the grounds between and surrounding the runways and taxiways.

The Airside Operations Department is responsible for safe aircraft operations including obstacle limitation and safe aircraft ground handling, airside service delivery and the coordination of all activities on the airfield and on the aprons. It is imperative that the department knows of all activities that take place on the airside.

5.2. Notification to ATC, ARFF and Airside Safety and Compliance Department

Air Traffic Control (ATC) is responsible for the safe movement of all traffic (aircraft, vehicles, equipment, and personnel) on the runways, taxiways (includes aircraft stand taxi-lanes, apron taxiways and rapid exit taxiways) including the runway/taxiway safety areas. Instructions issued by ATC shall at all times be unconditionally complied with irrespective of any claims that may arise from it. Air traffic control services are provided by Air Traffic and Navigation Services (ATNS).

Aerodrome Rescue and Fire Fighting Department (ARFF) is responsible to ensure that safe runways and taxiways (includes aircraft stand taxi-lanes, apron taxiways and rapid exit taxiways) are available for aircraft use. ARFF is also responsible for the general safe house keeping of the airfield. In carrying out their responsibilities, ATC and ARFF constantly and continuously coordinate on activities that take place on the airfield (runways, taxiways, and surrounding grounds).

The Airside Safety and Compliance Department is responsible for safety enforcement and compliance with the **ACSA Airfield Standard Operating Procedures (ASOP)**. The ASOP govern the movement of aircraft, vehicles, equipment and pedestrians and all work conducted on the apron and the airfield. These procedures can be accessed on the ACSA website or through the ACSA project managers.

Because of the foregoing, it is imperative that ATNS know of all activities that take place on the runways, taxiways, aircraft stand taxi-lanes and the runway/taxiway safety areas (runway/taxiway strips). The ARFF Department, the Airside Operations Department and the Airside Safety and Compliance Department must know of all activities that take place on the aprons and the airfield. These departments and ATNS must be engaged from the early stages of planning the work and airside work safety plans (**Annexure 1** attached) should be developed with their involvement and submitted before the actual construction work commences. Information shall be submitted at the start of the construction work on the prescribed form (**Annexure 2** attached) and daily before work commences on the prescribed form (**Annexure 3** attached). **Annexure 3** is vital in instances of emergencies and low visibility operations (LVO) when the airfield/apron must be evacuated.

Personnel, vehicles, or equipment wishing to access runways, taxiways and the runway/taxiway safety areas shall be equipped with a two way radio operating on the then current ATC ground frequency. Radio operators must be holders of a valid radio telephony licence issued in terms of the ACSA Policy and Procedure no C030 001 and C010 002. Where a person is not a holder of such licence such person shall be escorted by a holder of a licence. The escorted vehicle shall always follow behind the vehicle escorting.

Before entry onto a live runway or taxiway or a runway/taxiway safety area permission shall be requested from ATC, and one will only proceed after receipt of a clear approval to enter the runway or taxiway or the runway/taxiway safety area. When a request to vacate is received this shall be complied with immediately irrespective of any claims that may arise from it.

5.3. Access

I. Commencement of Work

Daily before work commences, the work site supervisor shall report to the ARFF Head of Department on duty if working on the airfield or to the Airside Safety and Compliance Senior Safety Officer on duty if working on the apron. Details of the work party shall be submitted on the prescribed form (**Annexure 3**). Before accessing the runways, taxiways and runway/taxiway safety areas clearance shall be obtained from ATC on the appropriate radio frequency.

A request from ATC, ARFF, Airside Safety and Compliance Department shall be complied with immediately irrespective of any claims that may arise from it.

II. Runways and Taxiways

Runways and Taxiways include the safety areas adjacent to the physical runways and taxiways, and these areas increase in dimension in bad weather conditions. When ATC declare LVO all working parties on the airfield should vacate the airfield and report to ARFF station for further instruction.

III. Bad Weather Conditions/LVO

In bad weather conditions no work shall be permitted on the airfield unless it is of an emergency nature i.e., it affects the safe operation of aircraft or the continued availability of the runways and taxiways. Note that bad weather conditions include low visibility and/or low cloud base. ATC shall make a determination and inform the ARFF Department. The ARFF Department shall ensure that all work on the Airfield stops, and all working parties vacate the airfield immediately irrespective of any claims that may arise from it.

IV. Emergency

Where an emergency situation develops, it might be requested that all work stops, equipment and personnel be evacuated from the Airside. Such request shall be complied with immediately irrespective of any claims that may arise from it.

5.4. Vacating Work Site

Daily before a worksite is vacated it shall be inspected for safety compliance. Before vacating the work site (at the end of a work period or at the end of the project) the contractor shall clean up and restore the site to an acceptable condition. If it is on the airfield ARFF shall be informed and if on the apron Airside Safety and Compliance shall be informed to conduct an inspection. The contractor shall not vacate the site until these inspections have been conducted and the site declared safe for operations. If further work is required to make the site safe, this work shall be conducted by the contractor irrespective of the delays that it may cause.

6. Restrictions

6.1 Hours of Work

Because construction work must be conducted with minimal disruption to airport operations time restrictions may be imposed that will determine the times that work can be conducted and the length of the work shift. These restrictions may require that work be conducted only at night.

6.2 Hot Works

No work or procedure that might be a source of fire shall be conducted without a valid hot work permit issued by the ACSA Aerodrome Rescue and Fire Fighting Department. This is in accordance with the ACSA Policy and Procedure no B07001. Hot work permits shall be returned to the fire station on expiry and new permits issued to continue work or for new jobs. No new permit will be issued before the return of the expired permit.

6.3 Temporary Hazards

The prime responsibility for determining hazards and the degree of tolerable risk rests with ACSA Safety and Compliance Department. All hazards shall be marked and lighted in accordance with the requirements of the International Civil Aviation Organisation (I.C.A.O.) Annexure 14.

The Contractor shall consult with ACSA to determine the necessary processes and procedures for the control of temporary hazards. The consultation shall be done in good lead time to allow for notification to airmen (NOTAM) and the Civil Aviation Authority (C.A.A.) where necessary.
NB: Depending on the nature and duration of the work some notification processes require a lead time of three months.

6.4 Pre-construction agreements

ACSA, Air Traffic and Navigation Services (ATNS) and the Contractor will meet and agree in advance before the start of the project on the following: -

I. Ingress and egress points for construction vehicles, equipment and personnel including routes to and from the work site and the marking of routes if necessary.
II. The means of control of construction vehicles and personnel so as to minimize interference with aircraft and ground support equipment operations.
III. The scheduling of construction activities to conform as much as possible to periods of minimum aircraft and ground support equipment operations activity. Because of this it might be required that the work is conducted at night.
IV. The disposal of excavated material, storage of construction materials and equipment, and the conditions of the work site at the end of the period of work.
V. The demarcation of the work area, signage, and lighting.

7. General

8.1 Radio Communication

The Contractor shall provide and maintain an acceptable radio communication system for all his construction vehicles and self-propelled plant moving outside the demarcated work area. This system must be approved by ATNS to prevent any interference with ATC equipment.

If working on runways, taxiways and runway/taxiway safety areas radio communication between ATC and the contractor shall be established for the duration of the Contract. The Contractor shall provide the radios and required number of units will be determined by the Airport Manager or his/her designated representative. The Contractor will be responsible for all maintenance costs and will not have any claim for the costs incurred in using longer haul routes or deviations because of a break in communication. If required, personnel of the Contractor will have to undergo a basic course in radio communications at the start of the Contract.

8.2 Radio Interference

All vehicles and plant used by the Contractor, his subcontractors or suppliers within the security area must be fitted with approved radio frequency suppressors. Any vehicle or plant found not to comply with this requirement will not be allowed on the air-side.

8.3 Compliance with instructions

If the Contractor does not promptly comply with all instructions of the Airport Manager or his/her designated representative or Air Traffic Controller, ACSA has the right to amend the working schedule in aid of safety. ACSA has the right to suspend all works until the Contractor, in the opinion of the ACSA Safety and Compliance Department or ARFF Department, complies with the requirements irrespective of the delays that it may cause.

8.4 Movement on the Airport, Barriers, Lights and Markings

It is the responsibility of the Contractor to properly control the movement of personnel, vehicles and plant involved in the construction work. The Contractor shall erect, maintain, and remove all temporary barriers, warning lights and markings as required by the Airport Manager or his/her designated representative.

Working areas should be blocked off from the active parts of the aircraft movement areas and service roads by the erection of physical barriers. This is to warn pilots and GSE/vehicle operators and also to preclude construction work vehicles and personnel from inadvertently straying into operational areas. Barriers must be appropriately marked for day use and adequately lit at night (no danger tape and/or loose cones). Orange plastic cones (750mm high) may be used to demarcate work areas on the aprons. These shall be secured firmly in position to avoid being blown by wind and/or jet blast.

On service roads where work is in progress it shall be demarcated on the paved trafficked sides by using approved demarcation barriers (no danger tape and/or cones). On aircraft movement areas appropriately marked barriers and/or closure boards by day and red lights by night shall be used. Guidance on the marking of unserviceable areas and obstacles is contained in ICAO Annex 14, which can be requested from the project manager. The Contractor shall take special note of the fact that all temporary traffic-control facilities used must be suitably weighted and secured to withstand jet blast from passing aircraft.

8.5 Dust and Pollution Control

The Contractor shall limit dust pollution to the minimum as required by the Airport Manager or his/her designated representative. During windy conditions, ACSA may temporarily suspend all work where dust pollution creates unacceptable conditions until such time that conditions return to normal. The contractor may be required to implement dust management measures. In the case of working areas alongside the runways, taxiways, and aircraft parking bays it shall be a definite requirement that at all times, weekends and public holidays included, exposed areas are kept damp and free from dust and loose material which may be sucked into the engines of passing aircraft. The taxiways adjacent to the works shall be swept as necessary but at least once a day.

All costs involved in dust and pollution control shall be borne by the Contractor.

8.6 Storing of Vehicles, Plant and Materials

It is a requirement that, at the end of each work period/shift, all vehicles and plant are returned to the designated camp area allocated to the Contractor. With the approval of the Airside Operations Department, certain equipment may remain on or near the work area if the area is properly demarcated. Vehicles and plant must be safe guarded when not in use to avoid unauthorised use, which includes the safe keeping of ignition keys.

If material is temporarily stored outside the designated campsite areas, stockpiles shall be limited to a height 1,0m above natural ground level. No stockpiling will be allowed within runway and taxiway strips (safety areas).

8.7 Fires

No open fires whatsoever will be allowed on the air-side of the airport. All necessary precautions must be taken to prevent veld or other unauthorized fires.

In the case of fire, including veld fires, the Contractor must instruct his employees to assist the airport management in extinguishing the fire if requested to do so.

The Contractor shall indemnify ACSA against claims that may arise from fires due to negligence by the Contractor or his operations. If it is required by ACSA to extinguish any fires caused by the Contractor, the cost thereof will be for the Contractor.

In case of a fire caused by air traffic activities, the area involved shall immediately be evacuated by the Contractor to an area beyond a radius of 300m from the fire.

It might be requested that all work stops, equipment and personnel be evacuated from the Airside. Such request shall be complied with immediately irrespective of any claims that may arise from it

8.8 Environment

The Airports Company South Africa (ACSA) recognizes the impact new developments and construction work have on the environment and embraces the obligations of corporate environmental responsibility to manage and minimize these impacts as far as possible.

Design consultants are required to explore and implement feasible opportunities to minimize environmental impacts imposed by new developments, specifically impacts relating to storm water, groundwater and soil pollution, air pollution, resource and raw material utilisation, depletion of nonrenewable resources, waste, energy and water conservation measures etc.

Should approval for new developments be required in terms of the Environmental Impact Assessment Regulations, consultants are required to comply with any design requirements included in the "Record of Decision." Consultants are required to refer to ACSA's policies and procedures document T050 010M and document T050 009M for more information.

Sustainable environmental principles that are in line with legislation, as well as ACSA's environmental policies and procedures, must also be implemented during the construction phase of projects. Here consultants and contractors are required to consult ACSA's procedure N050 005M *Construction Activities,* as amended. The fundamental steps emanating from these procedures are outlined as follows:

- Principal Contractor to appoint Environmental Control Officer (ECO)
- Principal Contractor to develop an Environmental Management Plan (EMP) and Environmental Method Statements (EMS) – these to be approved by ACSA's ECO at least three days prior to commencement of works
- Principal Contractor to establish an Environmental Monitoring Committee (EMC)
- PEMC to meet at least quarterly or once a month review environmental performance, incidents and make recommendations to the Principal Contractor
- ECO to audit construction site continuously against the EMP and the EMS
- ACSA ECO to audit construction site and compliance to the EMP and the EMS
- Construction environmental awareness training to be conducted prior to works commencing.

8. Conclusion

In line with the Service Level Agreements between ACSA and the Airlines, accredited Handling Agents and tenants, all contractors and projects must be monitored by the ACSA Accountable Manager to ensure that agreed standards are adhered to. In view of this, Airside Operations and Airside Safety and Compliance must be involved in all construction, maintenance and repair work planning and programming. ACSA Project Managers must take cognisance of ACSA Procedure D030 006M Construction During Operations.