AIRPORTS COMPANY
SOUTH AFRICA

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ACSA PROJECT NUMBER: 4627

SCM Reference No: GRJ8035/2025/RFP

CONSTRUCTION HEALTH & SAFETY AGENT SERVICES

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Between **AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED**
(Registration Number: 1993/004149/30)

APPLICABLE AT: GEORGE AIRPORT

and **NAME OF BIDDER: _____**
(Registration Number:)

for **THE PROFESSIONAL CONSTRUCTION HEALTH & SAFETY AGENT SERVICES FOR THE TERMINAL EXPANSION PROJECT AT ACSA'S GEORGE AIRPORT FOR A PERIOD OF 60 MONTHS**

VOLUME 2 – The Contract

Contents

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 CONSTRUCTION HEALTH & SAFETY AGENT SERVICES FOR THE TERMINAL EXPANSION PROJECT AT ACSA'S GEORGE AIRPORT FOR A PERIOD OF 60 MONTHS**

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 draft 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.

CONSTRUCTION HEALTH & SAFETY AGENT

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

(in words)

……

……

(in figures)

R……

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:	*(Insert name and address of organisation)*		
Name & signature of witness		Date	

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 **Consultant** the amount due in accordance with the conditions of contract identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information
Part C5	Annexures

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.

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.

for the Employer

Signature(s)		**Date**
Name(s)		
Capacity		
Name and address of organisation	Airports Company South Africa Limited SOC George Airport, Western Cape, South Africa	
Name of witness		signature of witness & Date

Schedule of Deviations

1 Subject . . . . . .

Details . . . . . .

. . . . . .

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2 Subject . . . . . .

Details . . . . . .

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3 Subject . . . . . .

Details . . . . . .

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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.

	For the Employer	**For the Bidder**
Signature (s)		
Name (s)		
Capacity		
Name and Address	**Airports Company South Africa SOC Limited** George Airport Western Cape South Africa	*(Insert name and address of organisation)*
Name & Signature of witness		
Date		

Part C1.2 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:

A: Priced contract with activity schedule

dispute resolution Option W1: Dispute resolution procedure

and secondary Options

X7: Delay damages

X9: Transfer of rights

X10: *Employer*'s *Agent*

X11: Termination by the *Employer*[i]

X13: Performance Bond

X18: Limitation of liability

Z: *Additional conditions of contract* are clause Z1 to Z30, as applicable

of the NEC3 Professional Services Contract, April 2013.

10.1	The *Employer* is (Name):	Airports Company South Africa Limited SOC
	Address:	Airports Company South Africa George Airport Western Cape South Africa
	Tel No:	N/A
11.2(9)	The *services* are	Construction Health & Safety Agent

11.2(10)	The following matters will be included in the Risk Register • **Previously completed Stage Gate Reports** • **Access to Site (approvals and permits, police clearance required)** • **Statutory and ACSA Approvals** • **Site Constraints and constructability** • **Deviations from Programme & cash flow** • **Notification of claims** • **Financial & Procurement** • **Phased completion of services**	
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 subject to the jurisdiction of the Courts of South Africa.
13.1	The *language of this contract* is	English
13.3	The *period for reply* is	2 weeks
13.6	The *period for retention* is	N/A

2 The Parties' main responsibilities

25.2 The *Employer* provides access to the following persons, places and things

	access to	***access date***
1	Project Information	Upon acceptance of the Programme
2	Site Access	Upon approval of the airport access permits

3 Time

31.2	The *starting date* is:	Upon signing of the contract by the Employer
11.2(3)	The *completion date* for the whole of the *services* is	60 months after the start date.

11.2(6) The *key date*s and the *condition*s to be met are:

	***Condition* to be met**	***key date***
1	Stage 1 Report	As per accepted programme
2	Stage 2 Report	As per accepted programme
3	Stage 3 Report	As per accepted programme
4	Stage 4	As per accepted programme
5	Stage 5	As per accepted programme
6	Stage 6	As per accepted programme

31.1	The *Consultant* is to submit a first programme	4 weeks upon signing of the contractor by the Employer
32.2	The *Consultant* submits revised programmes at intervals no longer than	4 weeks.

4 Quality

40.2	The quality policy statement and quality plan are provided within	4 weeks upon signing of the contract by the Employer.
41.1	The *defects date* is	52 weeks after Completion of the whole of the *service*s.

5	**Payment**	
50.1	The *assessment interval is*	25th day of each successive month.
51.1	The period within which payments are made is	4 weeks.
51.2	The *currency of this contract* is the	South Africa Rand (ZAR)
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**	
81.1	The amounts of insurance and the periods for which the *Consultant* maintains insurance are	

Event	**Cover**	**Period of insurance**
failure by the *Consultant* to use the skill and care normally used by professionals providing services similar to the *service*s	Refer to Annexure 1	Minimum of 5 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*	Refer Annexure 1	Minimum of 5 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 No. 130 of 1993	5 years

81.1	The *Employer* provides the insurances	Refer to Insurance Schedule, Annexure 1
82.1	The *Consultant*'s total liability to the *Employer* for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	Refer to Insurance Schedule, Annexure 1
	The *Consultant* provides these additional insurances.	Refer to Insurance Schedule, Annexure 1
9	**Termination**	Refer to Secondary Clause X11.
10	Data for main Option clause	
A	**Priced contract with activity schedule**	
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 (Name)	TBC
	Address	

	Tel No.	
	Fax No.	
	e-mail	
W1.1	The *Adjudicator* is	the person selected by the Party intending to refer the dispute, from the **Panel of Adjudicators** listed in **Annexure C.1** of this Contract Data.
W1.2(3)	The *adjudicator nominating body* is	the Chairman of the Johannesburg Society of Advocates, or his successor or his nominee.
W1.4(2)	**The tribunal is**	**Arbitration**
W1.4(5)	The *arbitration procedure* is	as set out in the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	George Airport, South Africa
	The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the *arbitration procedure* does not state who selects an arbitrator, is the Chairman of the Association of Arbitrators (Southern Africa)	The Chairman for the time being of the Arbitration Foundation of South Africa (AFSA) (or its successor body) or his nominee.
12	**Data for secondary Option clauses**	

X7	**Delay damages**		
X7.1	Delay damages for late Completion of the whole of the *services* are		Amount per day is 0.05% up to the maximum of 10% of the total contract value.
X10	**The *Employer's Agent***		
X10.1	The *Employer's Agent* is	TBC	
	Name:		
	Address:		
	The authority of the *Employer's Agent* is	**Includes but not limited to the following:** • **To manage the project on behalf of the Employer.** • **To assess and process all invoices payable by the Employer.** • **It is the Employer's sole discretion to amend the authority of the Employer's Agent under this contract through prior written communication to the *Consultant*.**	
X11	**Termination by Employer**	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	The *Consultant's* liability to the *Employer* for indirect or consequential loss is limited to	R0.00 Nil – Neither Party is liable to the other for any consequential or indirect loss, including but not limited loss of profit, loss of income or loss of revenue.
X18.2	The Consultant's total liability to the Employer for defects due to his design which are not listed on the Defects Certificate is limited to	The total of the incurred losses and/or damages caused to the property
X18.3	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 incurred losses and/or damages caused to the property

Z ***Additional conditions of contract***

The *additional conditions of contract* are

AMENDMENTS TO THE CORE CLAUSES

Z1 **Interpretation of the law**

Z1.1 **Add the following at the end of 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.

Z2 **Add the following at the end of core clause 12:**

Z2.1 In this contract:

Z2.1.1 references to any Party to the Contract include its successors or permitted assigns;

Z2.1.2 references to the *Consultant* include the obligations of its personnel;

Z2.1.3 the references to the provisions of any law shall include such provisions as amended, re-enacted or consolidated from time to time in so far as such amendment, re-enactment or consolidation applies or is capable of applying to any works under this Contract;

Z2.1.4 references to this Contract and any deed, Contract or instrument are deemed to include references to this Contract or such other deed, agreement or instrument as amended, novated, supplemented, varied or replaced from time to time;

Z2.1.5 references to a "person" include a natural person, company or any other artificial person or other corporate entity, a charity, trust, partnership, joint venture, syndicate, or any other association of persons;

Z2.1.6 references to "month" shall be to a calendar month;

Z2.1.7 headings are for convenience only and will not be taken into consideration in the interpretation of the Contract;

Z2.1.8 where any number of days is prescribed, those days shall be reckoned exclusively of the first and inclusively of the last day unless the last day falls on a day that is not a working day, in which event the last day shall be the next succeeding working day;

Z2.1.9 any provision in Contract that is or may become illegal, invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such prohibition or unenforceability in such jurisdiction and shall be treated as severed from the balance of Contract in such jurisdiction, without invalidating the remaining provisions of Contract in such jurisdiction or affecting it in any other jurisdiction;

Z2.1.10 references to any amount shall mean that amount exclusive of VAT, unless the amount expressly includes VAT;

Z2.1.11 the rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given;

Z2.1.12 the rule of construction that the Contract shall be interpreted against or to the disadvantage of the party responsible for the drafting or preparation of Contract shall not apply;

Z2.1.13 words and abbreviations that have well known technical or trade meanings are used in the Contract in accordance with such recognized meanings;

Z2.1.14 references to a "*subsidiary*" or a "*holding company*" shall be references to a direct or indirect subsidiary or holding company as defined in the law of the jurisdiction of the place of incorporation of the company that has a subsidiary or holding company and "affiliate" is any company that is under common control with such subsidiary or holding company;

Z2.2 Time is of the essence in the performance of the parties' respective obligations.

Z3 Early Warning: add the following at the end of core clause 16.2:

The Consultant ensures that a sub-consultant attends risk reduction meeting if its attendance would assist in deciding the actions to be taken.

Z4 The *Consultant*'s obligations: Delete core clause 21 and replace with the following:

Z4.1 The *Consultant* Provides the *Services* in accordance with the *Scope* and with due expedition and without delay.

Z4.2 The *Consultant's* obligation is to use the skill, care and diligence that is required of a professional providing similar services. The *Consultants* observes and/or exercise the degree of skill, care, diligence, prudence and foresight which would reasonably and ordinarily be exercised by a skilled and experienced *Consultant* in relation to his practices, methods, techniques, specifications and/or standards (whether in respect of design, engineering, construction, performance, safety, workmanship, equipment, components or otherwise) engaged in the same type of undertaking under the same or similar circumstances and conditions to the Services.

Z4.3 The *Consultant* represents that he is and ensures that he is at all times fully experienced, properly qualified, registered, licensed, equipped, organized and financed to perform the Services in terms of this contract.

Z4.4 The *Consultant* warrants that he has satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information provided to him as at the Contract Date.

Z5 Sub-consulting

Add the following as a new core clause 24.4: "The *Consultant*, within five days of request by the *Employer*, provides proof to the *Employer* that the *Consultant's* payment obligations towards its sub-consultants have been discharged. Failure by the *Consultant* to provide such proof to the satisfaction of the *Employer* entitles the *Employer* to certify payment directly to any such sub-consultant and the *Consultant* has no recourse to recover such amounts from the *Employer*. Such direct payment does not create privity of contract between the *Employer* and such sub-consultant. The *Employer* may set-off such direct payment from the amounts due to the *Consultant*.

Z6 Add the following as a new core clause 26: Procedure for acceptance of the Consultant's Design Documents

Z6.1 If the Consultant assumes any design responsibility, then the *Consultant* submits the *Consultant*'s Design Documents to the *Employer* for acceptance at the times and in the manner and format stated in the Scope. For the purposes of this clause, the "***Consultant*'s Design Documents**" are the drawings, design details and specifications of work, Plant and Materials prepared by the *Consultant* for the works.

Z6.2 The *Employer* returns each *Consultant*'s Design Document to the *Consultant* marked either 'A' (accepted), 'B' (accepted with comments) or 'C' (rejected). If the *Employer* marks a *Consultant*'s Design Document 'B' or 'C', he states his reasons. A reason for not accepting a *Consultant*'s Design Document is that it does not comply with:

Z6.2.1 the Scope;

Z6.2.2 any previous *Consultant*'s Design Documents which the *Employer* has returned marked 'A', or the *Employer* has returned marked 'B' and the *Consultant* has amended to incorporate the *Employer*'s comments;

Z6.2.3 the applicable laws and regulations; or

Z6.2.4 any other provision of this contract.

Z6.3 The Employer responds to the Consultant in accordance with clause Z6.2 above as soon as practicable. The *Consultant's* Design Documents shall not proceed to the next stage of the design process without the necessary response from the *Employer*, which response shall not be unreasonable delayed or withheld.

Z6.4 Where a *Consultant*'s Design Document is returned marked 'A', the *Consultant* proceeds with the relevant work in accordance with the *Consultant*'s Design Document.

Z6.5 Where a *Consultant*'s Design Document is returned marked 'B', the *Consultant* amends the *Consultant's* Design Document to incorporate the *Employer's* comments and submits the *Consultant's* Design Document as so amended to the *Employer* for the *Employer's* acceptance. The *Employer* responds to the *Consultant's* amended Design Documents above as soon as practicable. The *Consultant's* shall not proceed with the relevant work in accordance with the amended *Consultant's* Design Documents until such amendments are accepted by the *Employer*, which acceptance shall not be unreasonable delayed or withheld.

Z6.6 Where a *Consultant*'s Design Document is returned marked 'C', the *Consultant*:

Z6.6.1 amends the *Consultant*'s Design Document to incorporate the *Employer*'s comments,

Z6.6.2 re-submits it to the *Employer* for acceptance; and

Z6.6.3 does not proceed with the relevant work until the *Employer* has returned it marked 'A' or 'B' and, where it is marked 'B', has complied with clause Z6.5.

Z6.7 If the *Consultant* disagrees with a comment of the *Employer* on a *Consultant*'s Design Document marked 'B' or 'C', he notifies the *Employer* within one week of receipt stating his reasons and that in his opinion compliance with the comment will give rise to a change in the Scope. The *Employer* replies within one week of receipt of the *Consultant*'s notice either confirming or withdrawing his comment. A confirmation or withdrawal by the *Employer* is not an acceptance of the *Consultant*'s opinion

Z6.8 If the *Consultant* does not notify the *Employer* within one week that he disagrees with a comment of the *Employer*, compliance with the comment does not give rise to a change in the Scope.

Z7 Extending the defects date: add the following as a new core clause 42:

Z7.1 If the *Employer* cannot use the work 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 work.

Z7.2 The *Employer* 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.

Z8 Assessing the amount due:

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

Z9 Payment

Z9.1 **Delete the first sentence of core clause 51.1 and replace with the following:**
Each payment is made by the Employer within three 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.

Z9.2 **Add the following as a new core clause 51.6:**
If the *Consultant* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.4 is then calculated from the delayed date by when payment is to be made.

Z10 Compensation events: core clause 60.1(1) is amended to read as follows:

(1) The *Employer* gives an instruction to change the Scope, except

- a change to the Scope provided by the *Consultant* which is made either at his request or to comply with another part of the Services;
- a change to the Scope arising from a decision at a risk reduction meeting where such a change is required as a result of the *Consultant's* fault or as a consequence of a risk carried by the *Consultant*.

Z11 Notification of a compensation event: the last sentence of core clause 61.3 is amended to read as follows:

If the Consultant does not notify a compensation event within four weeks of the date on which the Consultant became aware of the event or ought to have become aware of the event, he is not entitled to a change in the Prices, the Completion Date or a Key Date and the Employer is absolved from all liability in connection with the event.

Z12 Assessing compensation events: add the following at the end of core clause 63.4:

The Consultant shall only be entitled to changes to the Prices, the Completion Date and/or the Key Date if the compensation event affects a critical path.

Z13 Time periods for compensation events: add the following as a new clause 66.1:

The time periods stipulated in this clause 6 may be amended by agreement between the Parties and the Project Manager if the Employer's internal procedures dictate that the time periods be so extended and such agreement shall not be unreasonably withheld by the Consultant.

AMENDMENTS TO THE SECONDARY OPTION CLAUSES

Z19 Changes in the Law: Add the following as a new secondary option clause X2.2 (if option X2 is applicable to this Contract):

A change in law is defined as:

- the adoption, enactment, promulgation, coming into effect, repeal, amendment, reinterpretation, change in application or other modification after the Contract Date of any law, excluding (i) the enactment of any bill inside the country, but only if such bill is enacted without any material changes being made to the contents of such bill from the form published in the Gazette (as defined in the Interpretation Act, 1957) as at the Contract Date, and (ii) any such modification in law relating to any taxes, charges, imposts, duties, levies or deductions that are assessed in relation to a person's income; or
- any permit being terminated, withdrawn, amended, modified or replaced, other than (i) in accordance with the terms upon which it was originally granted, (ii) as a result of the failure by the Consultant to comply with any condition set out therein, or (iii) as a result of any act or omission of the *Consultant*, any Sub-Consultant or any affiliate to the *Consultant*.

Z20 **Delay Damages: add the following to as a new secondary option clause X7.3 (if option X7 is applicable in this contract)**

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

Z21 **Performance Bond**

Z21.1 **Amend the first sentence of secondary option clause X13.1 to read as follows:** The *Consultant* gives the *Employer* an unconditional, on-demand performance bond, provided by a bank or insurer which the *Employer* has accepted, for the amount stated in the Contract Data and in the form set out in Annexure B of this Contract Data.

Z21.2 **Add the following as new secondary option clause X13.2:** The *Consultant* ensures that the performance bond is valid and enforceable until the end of the *contract period.* If the terms of the performance bond specify its expiry date and the end of the *contract period* does not coincide with such expiry date, four weeks prior to the said expiry date, the *Consultant* extends the validity of the performance bond until the end of the *contract period.* If the *Consultant* fails to so extend the validity of the performance bond, the *Employer* may claim the full amount of the performance bond and retain the proceeds as cash security.

Z22 **Limitation of liability: Insert the following new clause as Option X18.4:**

Z22.1 The *Employer's* liability to the *Consultant* for the *Consultant's* indirect or consequential loss is limited to R0.00.

Z22.2 Notwithstanding any other clause in this contract, any proceeds received from the security bonds and guarantees provided by the Consultant in terms of this Contract and any insurances or any proceeds which would have been received from any insurances but for the conduct of the *Consultant* shall be excluded from the calculation of the limitations of liability listed in the contract.

ADDITIONAL Z CLAUSES

Z23 **Cession, delegation and assignment**

Z23.1 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. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the *Consultant*.

Z23.2 The *Employer* may, on written notice to the *Consultant*, cede and delegate its rights and obligations under this contract to any person or entity.

Z24 **Joint and several liability**

Z24.1 If the *Consultant* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the *Employer* for the performance of the Contract.

Z24.2 The *Consultant* shall, within 1 week of the Contract Date, notify the *Employer* of the key person who has the authority to bind the *Consultant* on their behalf.

Z24.3 The *Consultant* does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the *Employer*.

Z25 Ethics

Z25.1 The *Consultant* undertakes:

Z25.1.1 not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;

Z25.1.2 to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the *Employer* is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.

Z25.2 The *Consultant*'s breach of this clause constitutes grounds for terminating the *Consultant*'s obligation to Provide the Services 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.

Z25.3 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.

Z26 Confidentiality

Z26.1 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.

Z26.2 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*.

Z26.3 This undertaking shall not apply to –

Z26.3.1 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;

Z26.3.2 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;

Z26.3.3 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);

Z26.3.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z26.4 The *Consultant* ensures that all his Sub Consultants abide by the undertakings in this clause.

Z27 *Employer*'s Step-in rights

Z27.1 If the *Consultant* defaults by failing to comply with his obligations and fails to remedy such default

within the period stated in 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*.

Z27.2 The *Consultant* co-operates with the *Employer* and 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.

Z28 Liens and Encumbrances

The *Consultant* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Consultant,* vis-a-vis the *Employer,* waives all and any liens which he may from time to time have or become entitled to over such Equipment and any part thereof and procures that his Sub-Consultants similarly, vis-a-vis the *Employer,* waive all liens they may have or become entitled to over such Equipment from time to time.

Z29 Intellectual Property

Z29.1 Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.

Z29.2 IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works.*

Z29.3 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.

Z29.4 The written approval of the *Consultant* is to be obtained before the *Consultant*'s IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Consultant*'s IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP.

Z29.5 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:

Z29.5.1 the *Consultant's* design, manufacture, construction or execution of the Works;

Z29.5.2 the use of the *Consultant's* Equipment, or

Z29.5.3 the proper use of the Works.

Z29.6 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.

AMENDMENTS TO THE W OPTION CLAUSES

Z30 Dispute resolution: The following amendments are made to Option W1:

Z30.1 **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".

Z30.2 **The following clauses are added at the end of clause W1.3:**

Z30.2.1 "The Adjudicator shall decide the dispute solely on the written submissions of the parties. No oral submissions shall be heard during adjudication."

Annexure C1 - Panel of Adjudicators

One of the following adjudicators shall be selected by the referring party as and when a dispute arises.

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

C1.2 Contract Data – Part 2

Part two - Data provided by the *Consultant*

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.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The *Consultant* is (Name): Address Tel No. Fax No.	
22.1	The *Consultant's key persons* are:	

1. Name:

   Job:

   Responsibilities:

   Qualifications:

   Experience:

2. Name:

   Job:

   Responsibilities:

   Qualifications:

   Experience:

3. Name:

   Job:

   Responsibilities:

   Qualifications:

   Experience:

11.2(3)	The *completion date* for the whole of the *services* is	**Date on which the certificate of final completion is issued.**		
11.2(10)	The following matters will be included in the Risk Register	• **Site constraints and constructability** • **Access to Site (approvals and permits, police clearance required)** • **Deviations from Programme & cash flow** • **Delay in supply of material and equipment** • **Statutory requirements and approvals**		
25.2	The *Employer* provides access to the following persons, places and things	**access to**		***access date***
		1	**All relevant areas in the Airport**	**Upon obtaining permits**

2	**Relevant Engineering, Operational and Maintenance Personnel of ACSA**	**Upon signing of Contract**

Part C2 Pricing Data

1. Pricing must be as per the SACPCPM Guidelines Scope of Services and Recommended Guideline Tariff of Fees for the Construction Health and Safety Professionals registered in terms of the Project and Construction Management Profession Act No. 48 of 200, as per Government Gazette 42697 of 13 September 2019.
2. The normal services fee proposal must be a percentage fee based on the estimated building cost of R263 500 000,00 (Excl. Vat).
3. Disbursements will be included as a percentage of the total fee payable as guided by your fee scales and shall be payable at regular intervals during the life of the project. Payable from the disbursement will also be charges for the Airport Access Permits and related Training per person allocated to work full time on this project. The payment of disbursements will not include costs for travel. Any, and all other costs charged against the Disbursement will be paid strictly on a proven cost basis.
4. A discount of fees shall be at the discretion of the bidder (discounting is not compulsory).
    a) Permit costs will need to be paid up front by the successful bidder and claimed back from the disbursement cost allowance for permits. Proof of payment for permits to support the claim will be required.
    b) No mark-up to be levied on Permit costs.
    c) All employees will be checked for criminal records.
    d) Cost for lost permits and new employees will not be reimbursed by ACSA.
    e) Foreign Nationals will need to provide a valid working permit.

5. Approved Tenderers pricing regime (i.e. % of fees, disbursement, discount, etc.) at tender stage shall be applicable throughout the life of the project
6. The accepted form of offer will be for the duration of all 6 Stages, however the ***Initial appointment is for stage 1 - 3** (Phase 1) with full appointment for stage 4 - 6 (Phase 2) applicable after project feasibility is determined and approved by ACSA internal governance.
7. Instruction to proceed with subsequent phase in terms of this contract and the associated scope of work will be confirmed in writing by the Employer. Note that the Employer is under no obligation to continue with any stages of the project phase. Should the bidder not be granted approval to commence with phase 2, this will not be seen as a cancellation, termination or abandonment of the project that will trigger termination fees or any additional payments apart from those for services rendered up to the previous completed phase.
8. Consultant Fees will only be adjusted where the final cost of the works varies by more than 15% from the value on which the fee was determined at tender stage (Consultant appointment tender stage). The adjustment of the fees will take place at the following intervals:
    a. Upon receipt of the Investment Decision with the Approval of the FIDPM Stage 3 Report.
    b. In the event of termination of the contact.

c. Upon the appointment of the contractor/s and deviation of the construction value.

9. Payment of total fees shall be done as per percentage apportionment of fees at completion of each stage as set out in the relevant professional body's fee scale guidelines. The monthly prorata payment claims, including lump sum fee and time based fee will be agreed for each stage of the project in line with the progress made during that stage. All fee claims shall be submitted to the appointed project quantity surveyor for project accounting purposes.
10. Where provisional sum is provided (e.g. Specialist services allowance), it will be a fee provision which might not form part of the final payable fee to the service provider. If applicable, expenditure against the provisional sum will require submission of 3 quotations by the appointed service provider which will be adjudicated by the Employer prior to execution of service. Where the provisional sum is not spent or is partially spent, the balance of the unspent sum will be declared as a project saving.
11. Expenditure allocation against the provided fees contingency will only occur once substantiated and approved by ACSA. The consultant team is expected to conduct any and all aspects of work to assist ACSA in the decision-making process for the consideration of use of contingency. These activities are considered to be a part of the design development and associated standard fees. The use of contingency will only be adjusted (i.e. added to the construction value for fee determination) at the successful receipt of the investment decision in parallel with the FIDPM Stage 3 Approval.
12. During Handover and Close Out Phase (Stage 6 and FIDPM Stage 7). At this stage, a pro-rata of 50% split of the total fees allocated to Stage 6 will be payable as follows:
    - Initial 50% of the fees claim will be payable at the completion of the ORAT process and the signed oof acceptance by ACSA (and Project Stakeholders) of the submitted handover documentation.
    - Remaining 50% fees will be payable after successful certification of Final Completion of the Works and sign off approval by ACSA of the Project Close Out Report.
13. Period for payment of monthly fee claims will be in line with ACSA's payment cycle i.e. 30 days from receipt of correct invoice on a monthly basis by not later than the 25th of each month.
14. The professional consultant team is expecting to conduct any and all aspects of work to assist ACSA in the decision-making process for the consideration of use of contingency. These activities are considered to be a part of the design development and associated standard fees. The use of contingency will only be approved by ACSA, once substantiated and approved. The amendment / adjustment of fees will only be made (i.e. added to the construction value for % fee determination) at the successful receipt of the investment decision in parallel with the FIDPM Stage 3 Approval.

Pricing Table 1: Occupational Health and Safety Agent services

GOERGE AIRPORT TERMINAL EXPANSION - Professional Services Fees			
Table 1– Professional Fees	Estimated construction value		**R263 500 000,00**
Occupational Health and Safety Agent	Fees calculated as per the latest South Africa Council for the Project and Construction Management Professions Act No. 48 of 2000 fees guideline		Offered fees (Excl. VAT) **R**
	Percentage of fee offered		**%**
Stage of Services according to SACPMP	% of basic fee for each stage	Amount (Excl. VAT)	Offered Fee (Excl. VAT)
PHASE 1			
Work-stage 1 Inception	5%		
Work-stage 2 Concept and Viability	20%		
Work-stage 3 Design development	20%		
SUB TOTAL PHASE 1	**45%**		
PHASE 2			
Work-stage 4 Documentation & Procurement	10%		
Work-stage 5 Works / Construction	40%		
Work-stage 6 / 7 – Handover Close-Out	5%		
SUB TOTAL PHASE 2	**55%**		
SUB-TOTAL 1 (add Phase 1 & Phase 2)		**R**	**R**
Total Disbursements – 5 % of sub-total 1			R
SUB TOTAL 2 (Add Sub-Total 1 & Disbursements) – NORMAL SERVICES			**R**
Add the Total Additional Specialist Services from table 1B – Provisional Sum			R2 554 000,00
SUB TOTAL 3 (Add Sub-Total 2 & Additional Specialist Services)			**R**
Contingencies 20% of Sub-Total 3			R
TOTAL OFFERED FEE EXCL. VAT (Add Sub-Total 3 & Contingencies)			**R**
VAT 15% (OF TOTAL OFFERED FEE)			
TOTAL OFFERED PROFESSIONAL FEE INCL. VAT - Carry to FORM OF OFFER			**R**

Table 1B: Additional services: Environmental Assessment Practitioner and Environmental Control Officer:

Specialist Service	Provisional Sum
Environmental Assessment Practitioner (EAP) – As and when required	R1 834 000,00
Environmental Control Officer (For a period of 24 months)	R720 000,00
Total (Carried to Table 1)	R2 554 000,00

NOTE:

Tenderers must be aware that the CIDB Best Practice Guidelines #A3 – Evaluating Tender Offers, will be used ensure that there is no gross under-pricing or over-pricing of submitted prices.

*Project teams should make allowances for all communication and material commensurate with a project of this nature and value. This will include, but not be limited to, concept sketches, brochures with presentation material and user client sketches for approval, scale models, 3D representations etc. Note that the final rates utilised will be subject to prior approval by ACSA.

Failure to submit a priced offer using the prescribed schedules will make the bid liable for disqualification.

Do not leave any area blank in the pricing schedules (e.g. if not applicable (N/A) or included in cost elsewhere, indicate accordingly).

Bidder's offers that contain correctional fluid will be disqualified. Corrections must be countersigned.

Part C3 Scope of works and Scope of Services

Part C3.1: Scope of works

The scope of work entails the design, construction and commissioning of the Terminal Expansion Project and associated works at George Airport, in accordance with the design guidelines of the Functional Concept Design Layout developed by Airports Company South Africa (ACSA).

The ACSA Functional Concept Design Layout stipulates the demand related specifications, spatial provisions and sizing of circulation, queuing and operational elements for passengers & public in the airport terminal building. The functional concept design layout was produced to scale and must be considered as an initiation point in the design process to the extent that it communicates the integrated transportation network to be achieved by the development, the nodes and areas in that network, their sizes and ideal spatial relationships.

The scope of the work is broken down into the following key focus areas of work which sums up the overall project scope details:

Terminal Expansion: This will involve the expansion of the existing terminal building to accommodate increased passenger traffic which is outlined in the ACSA Concept Design Layout and the accommodation schedule, both developed to guide in the required expansion of the terminal building.

Terminal Renovation: This will involve the renovation of the existing terminal building to improve passenger experience, upgrade facilities, upgrade the information technology systems used to manage the terminal (baggage handling systems, IT systems (BMS), security systems and the passenger processing systems. It also involves the design and installation of building services, such as HVAC, lighting, power, plumbing and fire systems.

Sustainability Requirements: This will involve the ACSA requirement of delivering a 4 Green Star Certified Building for the project, of which a feasibility study must be conducted to allow ACSA to define and qualify the appropriate sustainability initiatives and test if a 4 Green Star rating is achievable or even desirable, that will provide ACSA with the maximum benefit within the project budgetary means.

Kerbside Relocation: This will involve the relocation and expansion of the kerbside operational elements and the existing ring road to enable the expansion of the terminal building.

Specialist Studies: This will involve stipulation of all Specialist Studies required and the extent of the scope of the studies. This includes investigations, condition assessment, surveys and analysis, demolition and clearing, utilities installation, access point establishment, site camps and other site establishment related activities.

Project Delivery management: This will involve the planning, producing methodologies, phasing and management of the design and construction activities. This will thus naturally include producing

construction phasing strategy (enablement work and main works), scheduling, cost estimating, risk management, and quality control of all project activities.

General Design Requirements for inclusion in scope: This will involve a detailed breakdown and listing of specific requirements from the various divisions within ACSA which the professional consultant team must include during design development.

The above key focus areas of scope must be read in conjunction with the ACSA Concept Design Layout below conceptualised for both ground and first floor areas of the terminal building. The accommodation schedule based on the ACSA Concept Design Layout was developed which provides minimum spatial upgrade requirements which should be adhered to, as it stipulates the spatial provisions required to increase the relevant existing processing areas within the terminal as part of the design intervention to increase terminal capacity:

Area Schedule	Current	Additional	Total SQM	Total QTY
GROUND FLOOR				
1. Passenger Processing Areas (m^2)	**2795**	**2061**	**4126**	**31**
Departure Concourse Area (m^2)	500	412	912	
Check-in Counter Incl. Spatial Provision for additional 4 x Check-In counters (qty)	16	8		24
Departures: Replacement / Expansion of existing Baggage Belt incl. Airside (m^2)	400	100	500	
Arrivals Concourse Area (m^2)	240	264	504	
Holding Lounge (Total) including 6 x relocated Boarding gates (m^2)	365	315	680	
Additional 1 x Security Point incl. spatial provision for 1 x additional security point (qty)	2	2		4
Spatial Provisions for 4 x Additional Boarding Gates (qty)	6	4		10
Arrivals: 3 x Code C Baggage Belt Area (qty)	2	1		3
Associated Service Area / Baggage Belt Area (qty) - unit = meters (m^2)	560	240	800	
Arrivals: Refurbishment of existing Baggage Hall Area (Existing area) = m^2	730	730	730	
2. Landside Retail Areas	**225**	**200**	**425**	**0**
Total Retail shops (m^2)	225	200	425	
3. Airline Office Accommodation (m^2) incl.	**197**	**153**	**350**	**0**
Airline Ticket Counters				
Airline Offices BOH				
Sub-Total (m^2)	**3217**	**2414**	**4901**	
FIRST FLOOR				
Office Accommodation (m^2)	775	325	1100	
Premium Lounge / Restaurant Area (m2)	1050	450	1500	
Back of House (m^2)	111	589	700	
Sub Total (m^2)	**1936**	**1364**	**3300**	**0**
GRAND TOTAL	**5153**	**3778**	**8201**	**31**

Table 1: Terminal Accommodation Schedule

The above accommodation schedule in derived from the below ACSA Concept Design Layout which was developed to guide spatial conceptualisation of the terminal and produce the scope of the terminal expansion. It must be noted that the stated total additional and new total square meterage numbers and total quantities numbers indicated in the Accommodation Schedule are the minimums based on the ACSA Concept Design Layout and will be subject of further improvement, if feasible, at design development stage with the appointed professional consultant team. This is applicable to anywhere else in this document, where additional and total numbers and quantities are provided.

The next sections will provide a breakdown of the scope in terms of the critical sections of the scope of work for the project, viz: Terminal Expansion, Terminal Renovation, Kerbside Relocation, Sustainability Requirements, Specialist Studies, Project Delivery Management and General Design Requirements for inclusion in scope. The table below provides a key to the indicate colours in the ACSA Concept Design Layout:

Colour Key: ACSA Concept Design Layout

	New proposed terminal expansion areas (Ground and First Floor)
	New proposed areas of retail and commercial lounges (Ground Floor & First Floor)
	New proposed areas of airline ticketing counters and back of house areas (Ground Floor)
	Existing areas of the terminal building (Ground and First Floor)

FIGURE 1: George Airport Terminal ACSA Concept Layout: GROUND FLOOR (Not to Scale)

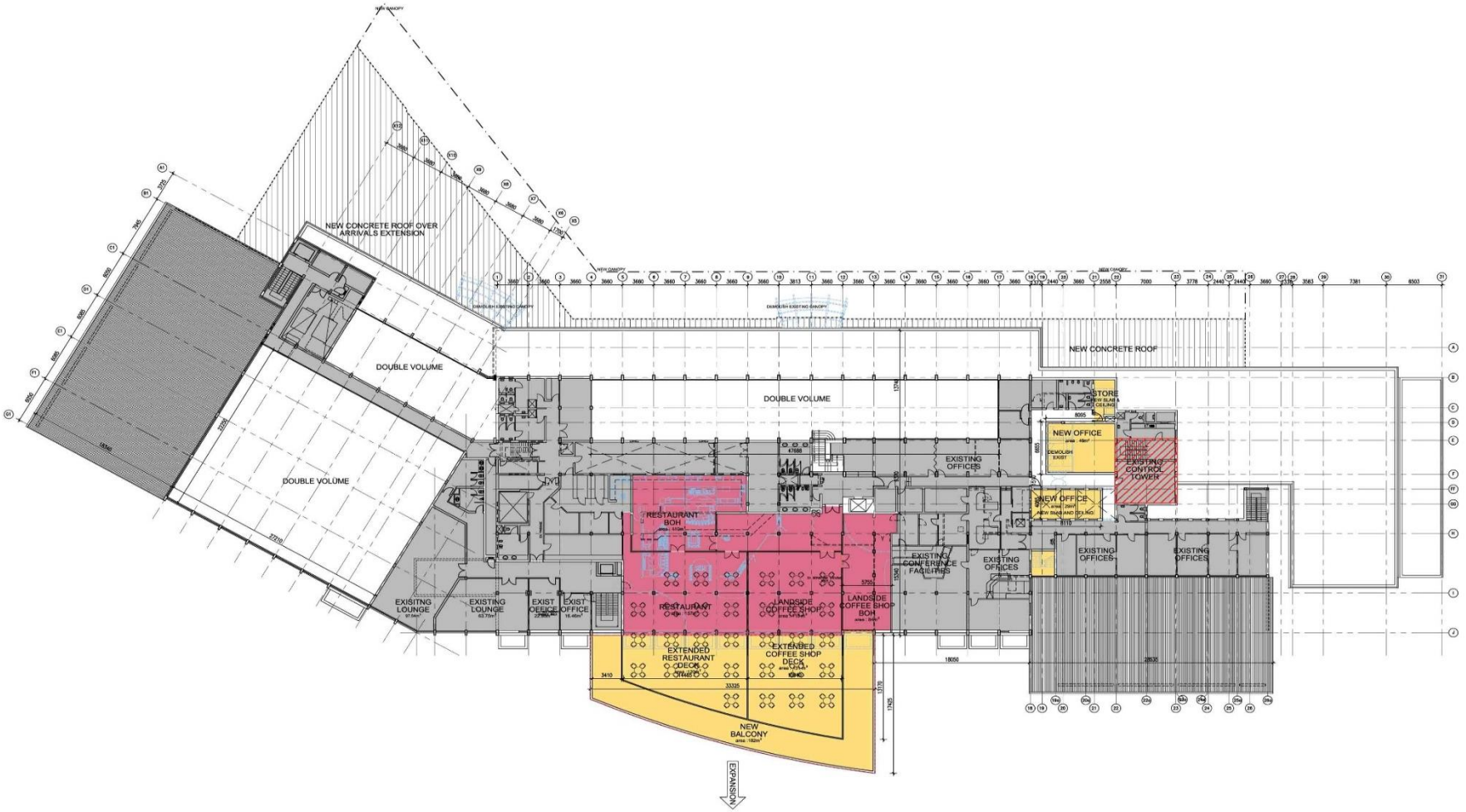


FIGURE 2: George Airport Terminal ACSA Concept Layout: FIRST FLOOR (Not to scale)

SCOPE OF WORK BREAKDOWN

The scope breakdown below must be read in conjunction with the ACSA Concept Design Layout (Figure 1 & 2) and the Accommodation Schedule (Table 1).

TERMINAL EXPANSION:

This involves the expansion of the existing terminal building to accommodate increased passenger traffic from the current 0.9 Million Annual Passengers (0.9 MAP) to a new terminal processing capacity of 2 million annual passengers (2 MAP). Critical operations sub-systems will require additional capacity as follows (Read this section in conjunction with the ACSA Concept Design Layout):

Ground Floor:

a) Terminal Landside / Public Concourse

An additional module of a minimum width of approx. 10m to the north-east (landside) must widen the landside concourse to allow more queuing space in front of the check-in counters as well as more circulation and commercial / retail space. The stated width is an estimate in line with the current ACSA Concept Design Layout and will be subject of further improvement, if feasible, at design development stage.

The landside / public concourse is seen to contain at least the following functional zones:

- General circulation area where passengers can wait / circulate with their greeters and proceed to check-in their luggage.
- Waiting area where meeters & greeters wait and meet arriving passengers.

The Landside / Public Concourse footprint is currently 500m^2 and the aim is to increase its footprint by an additional 412m^2 to achieve a new total internal footprint area of 912m^2. The stated additional area is an estimate in line with the current ACSA Concept Design Layout and will be subject of further improvement, if feasible, at design development stage with the appointed professional consultant team.

With the envisaged landside concourse footprint increase, an additional rentable space must be included for landside retail outlets and other terminal public services. The ultimate tenant mix and related design issues should be carefully confirmed in conjunction with the ACSA Commercial Division and the recommendations of the Commercial Study that will be undertaken under the project scope.

b) General Terminal Public Commercial Facilities

Landside Retail Area:

Retail and Food & Beverage outlets along the Public Concourse are to be designed and laid out according to the recommendations of the Commercial Study and ACSA's Commercial Division's requirements and guidelines.

- The layout of the commercial areas should be such that it facilitates the free flow and circulation of passengers.
- Retail spaces do not impede on the visibility of terminal directional signage and the Flight Information Display Systems (FIDS).

The current landside combined retail area footprint is a total of 225m^2 and with the proposed expansion of the terminal footprint, it is planned that an additional 200m^2 retail are footprint can be added (see ACSA Concept Design Layout) which will increase the retail footprint to a total area of 425m^2. This stated total new footprint is an estimate in line with the current ACSA Concept Design Layout and will be subject of further improvement, if feasible, at design development stage with the appointed professional consultant team.

Landside Airlines Commercial area:

Airlines operational offices (Ticket sales counters) will be sized according to airline needs and located sensibly to aid ease of operations (whilst avoiding placement of offices in prime retail space) with clear and simple access for passengers and public. Airline offices are to include back of house areas for each airline – to be confirmed by the professional consultants as part of the tenant coordination / requirements scope. As part of the expansion of the public concourse, the current total footprint area for the Airline Offices (Linked with their Ticket Sales Counters) is 197 m^2 and is to be increased by 153 m^2 to a new total of 350m^2. This stated total new footprint is an estimate in line with the current ACSA Concept Design Layout and will be subject of further improvement, if feasible, at design development stage with the appointed professional consultant team.

Meeters and Greeters area:

An adequately sized and dedicated Meeters & Greeters area should be provided for, where public can wait to meet passengers arriving through the Arrivals Halls. The meeters and greet area should therefore be designed to be near the Baggage Claim hall.

c) Terminal Check-in area

The Check in counter space will have its footprint increased towards the airside apron (North-West). The current total Check-in counter space, including the luggage conveyor belt behind the counters, is a total of 400m^2 and will require an additional footprint area expansion of 100m^2 to the north-west of the apron area. This additional footprint will enable a re-design of the automated linkage of the Check-Counters with the baggage conveyor belt behind the check-in counters.

There is current 12 total number of existing physical Check-In counters, and with the additional footprint, 4 additional counters (at minimum) should be added, thus taking total new number of physical Check-In counters to 16 (at minimum) – refer to accommodation schedule. Spatial provision should be made for 8 self check-in kiosks machines.

d) Terminal Security Processing and Screening

The existing two security screening machines are kept in the current / existing terminal location as indicated in the ACSA Concept Design Layout. An expanded and fixed queueing maze must be designed for to streamline processing of passengers towards the security screening process. One additional security processor and spatial provision for an additional security processor are required in this area.

As part of the design development, consideration must be given to relocate the current security screening area to another position / location to allow for the increased size of the facility, but also to improve on the circulation and movement of passengers from the check-in area to the security area. This will be developed further at Design Development stage with the appointed professional consultants.

e) Terminal Departure Lounge (Passengers Holding Lounge)

The Departure Lounge is a Restricted / non-public space located beyond the Security processing area. The Departure Lounge serves as a passenger holding area prior to the boarding gates which serve the remote aircraft stands.

The Departure Lounge is to be extended towards the airside / apron to allow an increased footprint area from 365m^2 to new total of 680m^2. This total footprint area is based on ACSA Concept Design Layout and is subject to review for and even larger footprint, if feasible, and subject to the design development review with the appointed professional consultants.

The increased footprint is to accommodate for additional passenger seating, retail spaces and improved vertical connectivity to the First Floor for access to the Premium Lounge areas.

With the increase in the Departure Lounge footprint, space provision must be made for additional passenger boarding gates. There is currently 6 boarding gates and a minimum total of 4 boarding gates is required to increase total number of gates to 10.

f) Terminal Arrivals Baggage Claim Hall

The existing baggage reclaim hall is to be expanded to allow for the installation of an additional baggage carousel belt. The carousel shall preferably be of the flat carousel type which provides additional capacity. The total area, spacing and layout for baggage claim hall should closely follow the guidelines referred to in the IATA Airport development Reference Manual (a global best practice airport design manual). Access to the guidance material will be provided by the ACSA Integrated Airport Planning Division.

Adequate space adjacent to the carousels should be allowed for the circulation and storage of baggage trolleys. The collection point for baggage trolleys should be located upstream of the main passenger flow i.e. passengers should be able to collect a trolley prior to or immediately upon entering the baggage claim area. Storage of trolleys between baggage devices is not preferable.

The existing carousels are fed from the baggage make-up area located on the north-east of the facility. The current operation baggage loading operations is not optimal. A redesign of the space is required to provide and expanded baggage reclaim hall together with the associated baggage offloading area, that may include the realignment of the baggage carousels to aid future expansion.

There are currently 2 existing baggage carousels and as indicated in the ACSA Concept Design Layout, 1 x additional carousel is to be added for a total compliment of 3 baggage carousels. Design provision for full replacement of the existing baggage carousels and the new additional carousel are to be included within the scope of this development as the existing carousels have reached the end of their useful life.

First Floor

The first floor is to be expanded from the existing total footprint of 1935m^2 to a new total of 3300m^2 to allow for additional Commercial / Premium Lounge offerings, Restaurants and improved back of house service areas. The additional premium lounge offerings are to include the reconfiguration of the

overall space which could possibly entail the relocation of the existing Bidvest Lounge to allow for each Commercial / Premium Lounge offering to include standalone ablution services within their leased area and views to the airside.

a) Commercial / Premium Lounge, Restaurant and Offices space

I. Commercial / Premium Lounge & Restaurants

There is currently an existing Premium Lounge and Restaurant on the First Floor which is included in the scope of the proposed terminal in terms of the proposal to increase the commercial spatial provision on the First Floor. As per the ACSA Concept Design Layout and the accommodation schedule, there is an existing area of 1050m^2 allocated to commercial spaces on the First Floor and it is proposed that an additional 450m^2 be provided to take the total new commercial space offering to a minimum total of 1500m^2.

The ACSA Concept layout indicates an option of spatial provision for premium lounge/s and or restaurant/s. The proposed Commercial Study will inform the recommended spatial provision for both the commercial lounge and restaurant in terms of quantities, size and location. The final accommodation schedule for restaurant/s and commercial lounge/s based on outcomes of the commercial study and the design development will need to provide sufficient space to allow for future growth / expansion of the facilities.

The restaurant/s must not have a direct link to the restricted / airside space of the terminal and a landside access / egress must be maintained for the restaurant patrons and staff.

Direct ingress and egress should be provided for between the Commercial Lounge/s and the Departure Holding Lounge to allow passenger movement between the spaces.

The design must ensure that sufficient provision if made for ablutions, showers and staff rest rooms within the envisaged total spatial footprint of the commercial lounge/s and restaurant/s facilities.

II. Office Accommodation (Conferencing):

A commercial office space must be provided on the First Floor that will increase the current total office footprint allocation of 775m^2, to a new total office footprint space footprint of 1100m^2. The office space will be utilised as commercial offering by ACSA for conference and training facilities with boardrooms.

b) Back of House

Provision should be made for back of house facilities to support the commercial lounge/s, restaurant/s and conference facility. Supporting facilities such as compliant access routes for the users of these facilities (e.g. people movers), sufficient ablutions, goods delivery passages, goods delivery lifts, waste chutes, kitchen, prep areas, staff change rooms, store rooms and goods delivery lifts. These back of house facilities must have no direct link to the restricted terminal areas.

c) Viewing Deck

A Landside viewing deck must be provided for in the design. The location and size of the viewing deck will be determined during design development stage. The viewing deck must have supporting ablution facilities and spatial provision for seating and smaller commercial offerings (e.g. vending machines, coffee kiosks, etc).

d) Standalone ACSA Information Counter

A standalone information counter must be designed with the Terminal public circulation space. The counter must be located in a position that will ensure visibility to passengers, ease of accessing and free of external weather elements.

e) Security Control Room,

A Control room / CCTV room is to be added within the terminal building. At design development stage, ACSA Security will provide the Professional Consultants with the necessary design guidelines for the required Security Surveillance room.

f) Airport Staff Rest Room

Provision for a common use Staff Rest Room facilities must be made during the design development stage of the project. The location of the facility will be recommended by the Professional Consultants for approval by ACSA.

TERMINAL RENOVATION:

George Airport terminal building was last renovated in 2009 and thereafter various minor works upgrades were undertaken, including maintenance work to improve the life of some assets. The proposed terminal expansion scope will create new spaces which will integrate with the existing terminal building and facilitate a uniform seamless passenger experience.

The Terminal expansion work will take place within a macro airport framework; therefore, it should be integrated with other airport systems (current and planned) to facilitate smooth and efficient airport

operations. The design and specification of new key building services will need to be undertaken with the intention to integrate these services with existing services where feasible. This will require investigations of the current performance of the existing services, remaining serviceable life, required intervention to prolong the life of the existing services, services that will need to be partially or fully replaced and determination of ease of integration of existing services with the new building services.

a) Finishes

All finishes are to follow a quality standard similar to that achieved in the existing terminal. The normal considerations related to life cycle costing (e.g. durability, design life etc.) will apply. The finishes specified as part of design development for the new and the old / existing facilities must integrate. The design team must optimise for re-use of existing finishes which are good and replace what cannot reasonably be kept. The terminal must read as one continuous and seamless experience.

A 2D and 3D (and walkthrough video) model is to be developed by the professional team to clearly indicate the optimum combination of structure and finishes required to achieve a world class facility and simultaneously restrict upfront costs and ongoing maintenance expenditure to a minimum. This will form part of the Airport Theming study to be undertaken as part of the project scope.

The professional team will familiarize themselves with the policies and procedures laid down by ACSA in this regard, ensuring provision of branding, finishes and theming that is fully compliant with the stated objectives and standards.

b) Ablution Facilities

Sufficient provision for ablution facilities in all areas should be made according to the design passenger flows, maximum building population and the requirements of SABS 0400. Based on the outcome(s) during design development iterations, these figures will of course have to be continually revisited. Additional ablution facilities will have to be provided at least in the following public areas:

- Arrivals concourse.
- Baggage re-claim hall.
- Departure Holding Lounge.
- Airside Facilities:
    - Baggage Makeup Areas.
    - Airside Office Facilities.
    - Apron Offices.
    - Baggage Processing BOH Areas.

ACSA ambiance standards will be issued at design development stage to guide on airport specific requirements for public ablutions. Over and above these requirements, separate staff ablutions may be required following the considerations on separation of public and staff flows.

c) Airside Baggage Make up and Loading areas

Baggage screening and make-up is notionally maintained in the existing location with an expanded footprint and allows for increased footprint to the baggage make-up area and baggage loading areas. Additional staff facilities are required in these areas both on the arrivals and departures baggage makeup areas. Provision for the Hold Baggage Screening (HBS) facilities and provisions for a leased areas with provision for kitchenette, ablutions, restrooms and staff locker facilities. The Baggage system must have a designed buffer accommodation for peak hours i.e. parallel conveyor belt system.

Baggage make-up and baggage delivery areas: ACSA has nominally sized the requirements of these areas at a conceptual level in the accommodation schedule. Although the existing baggage make up facility is adequate to serve the current operation, a new makeup area serving the expanded check-in area must be redesigned and properly sized to enable sufficient space for baggage handling, baggage screening activities and holding of Out of Gauge baggage items at check-in areas and arrivals areas. The professional team should however provide confirmation of the above and also produce a high-level capacity scoping for future demand activity levels. The design team is also required to ensure that ACSA is kept abreast of all design aspects of these areas to ensure that all changes, however small, be taken into consideration. Furthermore, all design input required from ACSA on baggage installations should be clearly stated at all times.

d) Service Yard

The professional consultant team will be required to investigate the tie-in and the expansion of the existing service yard and storage areas to the terminal building to ensure optimum use of the facilities to suit allocated operations.

e) Terminal Building exterior treatment

As part of the expansion and renovation of the terminal building, the professional consultant team will be required to conceptualise a new look and feel of the exterior of the building. This will require a design intervention to blend in the new terminal areas and the existing to create seamless exterior look and feel (External facades).

A design model is to be developed by the professional team to clearly indicate the optimum combination of structure and finishes required to achieve a world class facility and simultaneously restrict high upfront capital and ongoing operational expenditure to a minimum. The design must also take into consideration weather conditions, orientation of the building, building theming (local attributes) and cost-effective maintenance cycles.

Where there are existing facilities which are out of scope, when embarking upon design development and specification of terminal façade treatment, the Professional Consultants will be required to make recommended options to ACSA of the finishes that will need to be considered for application to the areas that are out of scope e.g. façade design, cladding, painting, etc.

f) Building systems design and Upgrades to terminal management systems

The Professional Consultant team is to ensure sufficient capacity of the electrical, electronic, mechanical and other services to cater for the projected demand increase resulting from the terminal expansion. Logical location of all services installations and service cores is required to ensure accessibility during maintenance, that these installations will not hinder future terminal expansion and will not obstruct passenger circulation. Furthermore, the team is required to consider the entire life cycle of the installations in making design decisions and specifications. This will involve for the design and installation of building systems, such as HVAC, lighting, power, electronic, plumbing and fire systems.

The upgrades to the technology systems used to manage the terminal, such as baggage handling systems, IT systems, BMS, security systems and passenger processing systems will also require careful design and specification consideration by the Professional Consultant team. This also entails the consolidation and replacement of all existing infrastructure as necessary to ensure replacement of plant and equipment that is deemed to be at end of life.

ACSA Enterprise Asset Maintenance (EAM) requirements and minimum engineering design standards/guidelines are included and are to be reviewed in consultation with ACSA EAM as part of the preparation of the FIDPM stage 1 report.

SUSTAINABILITY REQUIREMENTS

Sustainability is engrained in all aspects of ACSA’s business. The Sustainability requirements and the objective of delivering a Green Star Certified Building for the project are listed within the EAM Requirements. It is however required that a specialist study be conducted to allow ACSA to define

and qualify the appropriate sustainability initiatives and if a 4 Star Green Star rating is achievable or even desirable, that will provide ACSA with the maximum benefit within budgetary means.

The Green Building Architect (GBCSA registered) will be appointed to undertake the feasibility study with scope recommendations to enable the George Airport terminal building to obtain at least a 4-star sustainability rating for the proposed terminal expansion.

The core professional consultant team will participate in the implementation of initiatives to ensure that the building once completed, achieves the desired green star rating based on the ACSA approved scope recommendations from the Green Building Architect. As a start, proper fee allowance must be made by all the consultants for inclusion of the approved Green building scope items within the design development of the entire project scope.

KERBSIDE RELOCATION:

The expansion of the terminal building towards the landside area (North-East) of the airport will have implications on the existing roadside kerb and the terminal access landside ring road. Included in the project scope is the relocation of the kerbside ring road from its current location. This will enable for the extension of the terminal building towards the North-East of the terminal as indicated notionally on the ACSA Concept Design Layout.

A new kerbside parking design will have to be proposed and approved by ACSA which will at minimum cater for the following kerbside requirements:

- Short stay passenger drop off and pick up parking bays
- Drop off and pick up areas for tourism busses and mini-bus taxis
- Public Taxi parking bays – drop off and pick up (Metered taxis and e-hailing)
- Kerbside baggage drop off operation
- Parking pay stations
- Public Transport Offerings e.g. Go George

A Traffic Impact Assessment (TIA) will thus need to be undertaken to inform the design of the landside ring road in the new location as well as the impact of parking losses emanating from the relocation and how these can effectively be replaced elsewhere within the airport.

Consultants will have to obtain letter of Environmental Studies / Water Use Application or exemption from the Competent Authority for the proposed relocation of the road after carefully studying on whether there will be any triggers within the project that will require environmental study.

SPECIALIST STUDIES (Normal and Additional Services):

The following studies are required to be undertaken by the appointed Professional Consultants team either as part of the normal services or additional services to enable the finalisation of the design. These services will be incorporated into the Consultant Contract and delivered as part of the scope of services. These studies will be initiated during design development, as and when needed:

a) *Building Investigation / assessment*

As part of the normal services in order to understand the current condition, performance and remaining life, the professional consultant's team will be expected to undertake an assessment / investigation of the existing building elements i.e. services, building finishes, structural integrity and capacity of existing bulk services. Outcomes of the assessment / investigation will enable the professional consultants to advance proposals to ACSA of the required extent of replacement or refurbishment of the building elements and integration with the terminal expansion areas.

Professional consultant team will be expected to ensure sufficient capacity of the electrical, electronic, mechanical and other building and related services to cater for the projected demand. Logical location of all installations is required to ensure accessibility during maintenance and that the services installations will not hinder future terminal expansion and will not obstruct passenger circulation. ACSA EAM minimum design standards /guidelines will be provided.

Furthermore, the professional team is required to consider the entire life cycle of the installations in making design and specification decisions. This entails the consolidation and replacement of all existing infrastructure as necessary to ensure replacement of plant and equipment that is deemed to be at end of life.

The professional consultant team will be required to undertake an assessment of all the existing bulk services to determine the availability and capacity of existing bulk services in anticipation for the terminal building expansion and ring road relocation. This will include assessment of electrical, mechanical, IT, water supply, sanitation and stormwater bulk services.

b) *As-Built Drawings*

There is currently no good records of as-built drawings for the building layout and existing building services for the terminal building. The appointed Professional Consultants will be required to undertake As-Built drawings verification on site as an additional service. Where there is no adequate

record of existing services drawings to inform design development, the professional team will be required to undertake 3D laser scanning, heat detection and mapping of existing services, including bulk services, IT installations / Infrastructure, in order to produce a reasonable set of as-built drawings that will aid the design development process for production of new design proposals and specifications.

Employer will endeavour to provide as much available records as possible of existing As Built drawings information from its archives to assist the professional consultants in compiling a reasonable set of As-Built drawings to inform the design development proposals.

c) *Vertical Circulation Study*

The provided ACSA Concept Design Layout excludes sections drawings, and primarily deals with layout in plan only. It will be a primary design task of the professional team to design the vertical circulation aspects of the building as part of the normal scope of service. This could include options of introducing new circulation cores for the building, to ensure separation of access between floors to the office areas (non-public areas), restaurant and lounge spaces on upper floor and goods delivery circulation (goods lifts, security screening of goods, etc) as part of operational considerations. The key parameters in this facet of the design process will be the following:

- Review of current operations including data collection / trip generation / hourly traffic statistics and use.
- Integration with existing structures, (existing levels must be verified and aligned with concept design)
- Cognizance shall be taken of all applicable standards in terms of maximum inclines and slopes on all elements of the terminal building. These include:
    - SABS standards for disabled/physically challenged persons.
    - International standards as prescribed by Airports Council International (ACI) IATA and ICAO.
    - International Best practice at airports of a similar size.
    - SANS Requirements related to vertical circulation and provisions
    - Separation of access to public and restricted areas.
- Sizing, Location and specification of facilities i.e. sizes and quantities of lifts in specific area appropriate to use (passenger and / or goods delivery / trolleys etc.)

In cases where a vertical circulation node is proposed, provision should be made for sufficient redundancy. The level to which this is taken would depend on factors such as design capacity required, functional use and location. Thus, in some cases redundancy may take the form of simple staircases. However, in some cases this possibility may of course be precluded by design regulations for the accommodation of disabled persons. Through design iterations these requirements will

therefore vary. The consultant team will be expected to closely consult with ACSA in working towards a final scope fix and design solution.

d) *IT Scope Study*

The IT Scope Study is an additional service required to flesh out the full extent of IT scope requirements for the project. At a macro level, and subject to the IT Scope Study, the professional consultant team must include the following technological elements which must form part of the output of the project:

- IT Brief Development to enable Project Requirements.
- Passenger Bag Drop & Self Service Kiosk's.
- Passenger Boarding e-gates.
- Flight information Display Systems (FIDS).
- IT server rooms & switch rooms.
- Telecom, PABX & PA server rooms.
- IT Backbone for tenants.
- Current and Future Provision of Work-Centres and Data Centres.
- 3rd Party IT Requirements (e.g. Airlines, Government, etc).
- Temporary / Enablement IT infrastructure.
  The IT Scope study will be undertaken by the appointed Electronic Engineer.

e) *Passenger Processing Simulation Study*

The objective of the Simulation Study will commence with a process of analysis / data collection of passenger flows and processing times at GRJ Airport within the departures area for the check-in areas and security processing areas. This data will then be used to further define / make provision for the future capacity scenario. The major outcomes of this study include the following tasks that are outlined below:

- Develop a simulation model aimed at understating the service levels and capacity of the future airport layout for the check-in areas and the passenger and hand-luggage security screening areas.
- Assess the capacity and service levels, in line with IATA recommended levels of services.
- Provide optimised configurations to improve service levels of passenger processing times, with recommendations for future growth.

The Simulation Study will comprise of the following activities which are additional services under the Architectural scope of service:

1. Review of existing documentation and related Data related to:

- Passenger flows.
- Processing times.
- Peak and off peak schedules.
- Terminal lay outs at the time of the survey.
- Calibration survey.

Deliverable: Status quo assessment of the envisaged / planned / targeted capacity for passengers, aircraft, Peak schedules, Processing times (peak and off-peak), future capacity analysis, Calibration and sensitivity analysis of existing survey data.

2. Discrete Model Formulation: Developing the algorithm to be used for assessing the future passenger flow analysis to identify the:
    - Structure and system of the waiting line.
    - Flow for arrivals (Distribution).
    - Service time probability distributions.
    - Service Rate.
    - Constraints.
    - Identify Scheduling peculiarities in time (peak and off-peak).
    - Identify scenarios for analysis.

Deliverable: Algorithm for assessing the process flow for the Check-in and security gates

3. Pedestrian Modelling: Develop a dynamic agent-based model to simulate the passenger service movements for the Departure areas to simulate the service quality for departure passengers. The following elements will be understood:
    - Determination of the characteristics of the entities to be simulated (flights and passengers)
    - Modelling passenger events:
        i. Passenger arrival.
        ii. Check-in.
        iii. Discretionary activities.
        iv. Security control.
        v. Retail use.
    - Modelling passenger behaviour:
        i. Journey times.
        ii. Queuing.
        iii. Delay.
        iv. Space density (pinch points).

Deliverable: Pedestrian model for GRJ departure level and model development report.

4. Simulation and results analysis: Running the model and assessing the results for both the models to determine the following:
    - Future capacity based on layout (peak and off peak).
    - Optimisation solutions for the future lay-out if any.
    - Future processing flow numbers at future service rates.
    - Proposed optimised service rates.
    - Scenario analysis.
    - Service level analysis.
    - Proposals and recommendations.

Deliverable: Assessment of the service and capacity analysis of the check-in and security processing area, providing optimised solutions and configurations.

5. Final report detailing: The final report will document the process of formulations the problem, developing the model and the analysis of the results to provide proposals and recommendations on optimisation.

Deliverable: Future capacity analysis and service level optimisation, proposed recommendations on improvements, if any.

f) *Geotechnical Study*

The Geotech Study should be undertaken for geotechnical investigation to assess the soil and rock profile across the site for new foundation designs. The primary objective of study is to assess the soil and rock profiles across the site so as to provide foundation recommendations, foundation and pavement design parameters as well as earthworks/pavement designs.

The study should present practical recommendations for site preparation (earthworks and terracing) and for the design and construction of foundations for the new buildings and the earthworks for the relocated landside Ring Road.

The investigation methodology should at minimum comprise of

- Desk study of existing site and regional information,
- scanning of underground services,
- soil resistivity tests,
- excavation of test Pits and / or drilling of boreholes
- laboratory testing
- compilation of all critical factual reports.

The Geotech Study shall be undertaken as an additional scope of service for the Civil & Structural Engineering services. Refer to Scope of Service for Civil & Structural Engineering.

g) *Topographical / GPR / Spatial Land Survey (Underground Services Scan)*

In the absence of an accurate record of spatial, site cadastral information and location of As-Built underground services, the professional consultants will be required to undertake a Topographical and

an intrusive 3D Ground Penetration Radar (GPR) Surveys and Heat Detection for the specific areas of site development i.e. all terminal expansion areas and Ring Road relocation area.

The survey is to include tagging of external services within the perimeter road service yard, airside entering and exiting the Terminal Building and adjacent buildings such as the Car Rental Area and Structures within the Parking Area. Analysis of the 2D topographical survey obtained from SAT map in June 2018.

The obtained survey comprised of the following:

- Topographical survey for air and landside portions along the perimeter of the terminal
- Services yard levels, kerbs and islands;
- Stormwater, water, sewer and electrical services invert and cover levels;
- Confirmation of external services direction;
- Tagging of all external services by means of numbering sequences for identification at a later stage;
- Obtain survey of piling positions and foundations;
- Obtain information of existing airport sewer pump station levels;
- Obtain information of existing stormwater treatment and if required detention dam levels;
- Produce a Civil 3D model that incorporates levels and services to visualise the interaction with buildings and the future footprint of the proposed new terminal building expansion within the BIM model.
- Comprehensive photo report of infrastructure and any structures within the footprint with tremble files.

The extent of the survey will be determined in conjunction with the appointed consultant team. The Topographical / GPR / Spatial Land Survey GPR study shall be undertaken as an additional scope of service for the Civil & Structural Engineering services. Refer to Scope of Service for Civil & Structural Engineering.

h) *Traffic Impact Assessment*

It is envisaged that the current airport frontage road (known as Ring Road) will be relocated to make way for the expansion of the terminal building towards the Ring Road. The extent of the expansion of the terminal building and resultant extent of relocation of the Ring Road shall be determined once ACSA has signed off the concept design at (FIDPM Stage 2).

However, the relocation of the road will result in the new relocated road to have sufficient lanes, kerbside parking bays, necessary traffic controls and calming, and access to adjacent public parking facility. A traffic Impact Assessment (TIA) is therefore required to inform the ultimate design of the relocated Ring Road. The study will include at minimum the following:

- Study Area: Landside Traffic Access, Circulation and Parking (Short- and Long-Term stay) areas.
- Airport Traffic Count (Peak and off peak).

- Parking trends and parking circulation.
- Future developments.

The TIA will be undertaken as an additional scope of service for the Civil Engineering services on the project – Refer to Scope of Service for Civil Engineering.

i) *Commercial Study*

Creating a unique passenger retail experience is a critical element in the commercial strategy of the airport and is tied to the spatial location of the commercial properties to achieve the necessary commercial benefits. Therefore, the terminal design layout should be carefully crafted to achieve the optimum retail and commercial property mix suitable for a regional airport.

It is envisaged that a commercial study (part of this scope of works) must be undertaken to inform the best retail and property position, layout, mix, sizing and supporting services outlets. This will also include investigation of the commercially viable position of the advertising billboards within the terminal building.

It is therefore required that a Commercial Specialist be appointed to lead and undertake the Commercial Study to inform the retail, property and advertising tenant mix and new revenue opportunities for the George Airport Terminal Expansion project.

The tenant mix should be for both the retail and property type tenants.

Scope of the Commercial Study for retail, property and advertising facilities:

- **Retail Facilities**
  I. Review existing retail offering at the airport (desk top exercise and various site visits).
  II. Meet and interview current retailers.
  III. Meet with ACSA Retail Division to understand current contracting and rental regimes and lease expiry dates / renewal dates.
  IV. Benchmark George Airport against other relevant airports in sales and commercial area.
  V. Determine the tenant mix, size, number and nature of retail stores in the terminal building.
  VI. Determine the size, number and location of the common use back of house facilities not forming part of the tenant fit out for each retail store i.e. Storerooms, service cores, waste sites, etc.
  VII. Produce proposed concept design layout and options for approval by ACSA.
  VIII. Engage ACSA Commercial team on a regular basis of the progress and findings of the study and include fine tuning of the study.
  IX. Produce final recommendations for approval by the ACSA Commercial Division.
  X. Include spatial recommendations into the overall architectural design.

- Property Facilities
  I. Review existing property offering at the airport (desk top exercise and on-site visits).
  II. Meet and interview current property tenants.

III. Meet with ACSA Property Division to understand current contracting and rental regimes and lease expiry dates / renewal dates.
IV. Benchmark George Airport against other relevant airports in commercial property offerings,
V. Determine the tenant mix, size, number and nature of commercial property basket in the terminal building,
VI. Determine the size, number and location of the common use back of house facilities not forming part of the tenant fit out for each retail store i.e. Storerooms, service cores, waste sites, etc.
VII. Produce proposed concept design layout and options for approval by ACSA.
VIII. Engage ACSA Property team on a regular basis of the progress and findings of the study and include fine tuning of the study.
IX. Produce final recommendations for approval by the ACSA Property Division.
X. Include recommendations into the overall architectural design.

- *Advertising Facilities*

i. Review existing advertising offering at the airport (desk top exercise and on-site visits).
ii. Meet and interview current advertising tenants.
iii. Meet with ACSA Advertising Division to understand current contracting and rental regimes and lease expiry dates / renewal dates.
iv. Benchmark George Airport against other relevant airports in commercial advertising offerings.
v. Determine the advertising space mix, sizing, type, number and nature of commercial advertising basket in the terminal building.
vi. Determine the size, number and location of the common use back of house facilities required for advertising tenants within the terminal.
vii. Produce proposed concept design layout and options for approval by ACSA.
viii. Engage ACSA Advertising team on a regular basis of the progress and findings of the study, including regular fine tuning of the study.
ix. Produce final recommendations for approval by the ACSA Advertising Division.
x. Include recommendations into the overall architectural design.

The Commercial study shall be undertaken as an additional scope of service for the Architectural services. Refer to Scope of Service for Architectural services.

PROJECT DELIVERY MANAGEMENT:

This will involve the planning and producing methodologies, phasing and management of the design and construction activities. The professional consultant team will be required to produce a Project Management Plan which will outline how the team will manage the various stages of design development , project risk management, cost management, schedule / programme management, quality management and construction phasing strategy (enablement work and main works) which will be approved by ACSA, scheduling, cost estimating, risk management, and quality control of all project activities.

The professional consultants will also be required to produce methodologies for enablement work which will primarily be aimed at ensuring that current airport operations are not affected and take

precedence to project delivery activities. Proposals for enablement work must be cost effective and do not result in high sunk costs.

GENERAL DESIGN REQUIREMENTS FOR INCLUSION IN SCOPE

The following requirements will form part of the scope and should be included during design development to ensure full realisation of the project scope.

General Design requirements:

a) Major Factors for inclusion in Conceptual Design

The below factors affect the conceptual planning for the terminal expansion. Other factors to be identified are:

- Airport Traffic Categories.
- Airport Capacity Growth.
- Balance of required Airport Capacity and Facilities.

b) Basic Design Criteria

- Priority must be given to Airport Operations when undertaking design and construction methodologies.
- Seamless Integration for all airport operational areas.
- Confirmation of capacity of Airside Baggage make-up and delivery areas required.
- Investigation of tie-in and expansion of the existing service yard and storage areas.
- Design of landside kerbside ring road.

c) Vertical Design

The provided ACSA concept design layout excludes cross sections, but primarily deals with layout in plan only. It will be a primary design task of the professional team to design the vertical aspects of the building. The key parameters in this facet of the design process will be the following:

- Integration with existing structures, existing building levels (FFL and Heights) must be verified and aligned with concept design.
- Cognisance shall be taken of all applicable standards in terms of maximum inclines and slopes on all elements of the terminal building. These include:
    - SABS standards for disabled/physically challenged persons.
    - International standards as prescribed by Airports Council International (ACI) IATA and ICAO.
    - International Best practice at airports of a similar size

In all cases where vertical circulation nodes are required, provision should be made for sufficient redundancy and ease of future expansion - the extent of which would depend on factors such as design capacity required, functional use and location. Thus, in some cases redundancy may take the form of simple staircases. However, in some cases this possibility may of course be precluded by design regulations for the accommodation of disabled persons. Through design iterations these requirements will therefore vary. The professional consultant team will be expected to closely consult with ACSA in working towards a final scope fix and design solution.

d) Operations Management Requirements

The following design elements must be included in the design:

- Separate ingress & egress passages and doors for trolleys into the terminal building.
- Domestic and International security processing area in one location
- Enclosed Baggage wrap office space.
- Common use restrooms, training facility and boardrooms.
- Facilities for unaccompanied minors / wheelchair area and kiddie's room.
- Departure Check in counters – change all to streamlined clutter free counters space.
- Additional ablution facilities – Landside, Restricted and Airside areas.
- Investigate baggage belt being behind check-in counters. / on arrivals airside and provide automated and user-friendly optimum solution – manual override.
- All commercial areas:
    - Electrical metering infrastructure must accommodate usage-billing. This implies that each area must have its own DB inside the leased area (tenant DB). This tenant DB must be fed from an ACSA DB higher up – where the supply circuit breaker and usage meter will be located. Note that the usage electrical meters must be intelligent – able to communicate via ethernet – in order to enable remote AMR (Automatic Meter Reading).
    - Water infrastructure: Where water supply is provided for tenant spaces – ensure that the water supply point is metered accordingly. This will enable ACSA to recover revenue from water usage. Similar to the electricity usage meters, the water usage meters must also be intelligent in order to accommodate remote AMR.
    - Sand / Oil Grease Traps with ease of connectivity to all relevant areas must be included for all commercial areas with kitchens and prep areas.
- Seated smoking area (with smoke extraction) must be provided in Commercial / Holding Lounge.
- Provide dedicated and enclosed external landside smoking area / pods.
- Provide the Lost property office – best practice (security)
- A standalone Permit Office adjoined or located within close proximity to the Terminal building.
- Provide clear Way finding signage and fire evacuation plan/maps.
- Provide additional people movers – lifts and escalators.
- Overall operational office space in the Terminal
- Ambience/ finishes to reflect the local heritage and context – as per Theming study.
  Provide a Viewing deck (identify viable location and size).

Security Area required:

- Common use firearm desk – adjacent acceptance of oversized baggage.
- Departures and Arrivals – Emigrations, customs and port health facilities at arrivals.
- Level 1 to 5 screening and reconciliation room.
- E-gates.
- Search room/s.
- SAPS Office accommodation / counter within the terminal
- Dog Unit and Accommodation

- Provision of Spare parts / attic stock: FOR BOQ purposes:
  - All the items that are installed must make provision for a 15% spare allocation as part of the BOQ
    - Ablution items
      - Taps
      - Toilets
      - Urinals
    - Floor and Wall Tiles
    - Electrical fittings
    - Ceiling boards (If drop ceiling)
    - Paint
    - Handrails
  - Where spares / attic stock cannot be supplied – detailed maintenance requirements and scope / specification documents must be handed over by the consultants to ACSA Maintenance for the following infrastructure (This will ensure that the maintenance department can obtain the correct services and spares after the project has been completed):
    - HVAC infrastructure
    - Water infrastructure
    - Electrical infrastructure

e) Commercial Requirements

The extent of space requirements for retail, food & beverage, storage areas provisions, pop up shops etc, including locations and adjacencies will be defined through a Commercial Study. Commercial requirements are to be finalized with the ACSA Commercial Department. The consultant team is to include lease diagrams as per SAPOA requirements for all lettable areas and tenant coordination services.

f) Enterprise Asset Management (EAM) Requirements

The Professional Consultant team are to ensure sufficient capacity of the electrical, mechanical and other services to cater for the projected demand. Logical location of all installations is required to

ensure accessibility during maintenance, installations will not hinder future terminal expansion and there will not obstruct passenger circulation.

Minimum ACSA MEA Engineering Design Standards / Guidelines will be issued for inclusion, and the Professional Consultant team is required to consider the entire life cycle of the specified installations in making design and specification decisions. This entails the undertaking cost benefit analysis of sourcing, procurement, installation, maintenance and replacement of recommended specifications for all plant and equipment that is deemed to be at end of life.

The ACSA MEA Engineering Design Standards / Guidelines annexed and are to be clarified in consultation with EAM as part of the preparation of the FIDPM stage 1 report.

g) Sustainability Requirements

Sustainability is engrained in all aspects of ACSA's business. The Sustainability requirements and the objective of delivering a Green Star Certified Building for the project are listed within the ACSA EAM Engineering Requirements. It is however required that a specialist study be conducted to allow ACSA to define and qualify the appropriate sustainability initiatives and test feasibility (or even desirability) of achieving 4 Green Star rating, that will provide ACSA with the maximum benefit within the project budget.

h) Security Requirements

i. Expansion of the Terminal:

According to the National Aviation Security Program, the design of an airport shall:

- "Integrate security functions into the entire building in such a manner as to maintain the efficient usage of space for processing passengers, baggage, cargo and commercial items sold or used at an airport without sacrificing the needs of facilitation and commercial processes.
- Allow for the safe facilitation of firearms of passengers, in compliance with both the NASP and the Firearms Control Act, 2000 (Act No. 60 of 2000) and
- Allow for the easy implementation of contingency plans and other responses during crisis situations.

The airport's design shall also recognise the threat that explosive devices place on any large, publicly accessed structure and ensure that the design minimises any effects of an explosion. This can be achieved by:

- Designing structures and fittings to limit damage and casualties in case of attack,
- Ensuring that the materials used in the construction are capable of withstanding the effects of explosions and other forms of armed attack; where practical,
- Providing enhanced levels of protection for vulnerable or high threat areas and,

- Ensuring that security measures are considered when designing commercial spaces for revenue generation during planning stage,

The above will be included by the Professional Consultant team in the project scope of work.

ii. Security Screening Equipment:

The security screening equipment specification will be informed by a network-wide study that is currently underway. For the purposes of design, should the above-mentioned project not be complete by the time design decisions for this terminal expansion are required, the consultant team must provide design lanes with the following philosophy:

- It is envisaged that 1x additional security screening machine plus spatial provision for 1x security screening machine (total 2 additional) will be required for passenger processing, goods screening, staff processing at the terminal Central Search Point (CSP).
- Undertake Design option for a full body scanner to be shared between two lanes.
- Screening technology should enable the screen of laptops and other electronic equipment in bags (i.e. CTX machine).
- The lanes must be elongated to allow for multiple divest and reclaim positions.
- Automatic tray return is preferred, as this will assist in increased throughput, reduction in staff tray handling and the ability to increase passenger focus.
- A passenger repacking area at the search point must be provided. This will allow passengers to sort out their hold luggage and (possibly) put back their shoes.
- A storeroom for lost property/prohibited items is to be included.
- A space for firearm handling counter area is to be included.
- An office for the supervisor and staff area is to be included in close proximity to the CSP.
- Remote screening is viewed as the best solution as it minimises disruptions and there is less noise. A remote screening must therefore be identified for the possibility of remote screening. Screening positions at the lanes must however be designed for. The security study will verify which option is ultimately selected for the group.
- Security e-gates are required and will do the reading of the 2D bar code machines. Security gates with queue management and fixed queuing maze system is preferable.
- Professional Consultant team to investigate at design development stage, the breaking down of existing ablution facilities near the current central search Point (CSP), for positioning of the CSP as a proposed solution to accommodate more space and for queuing.
- The screening facility and must be able to facilitate the goods receiving for restaurants & lounges, an alternative option cannot be provided.
- A Security Control room/CCTV room is to be added within the terminal complex.

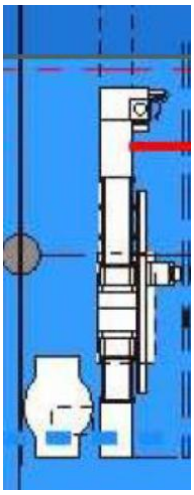


Figure 5&6: Security Queing Maze, E-gates and Secutity lane propsed design. The images above illstratrates a prefferered lane design with a full body scanner , CTX machine, queing management and security egates

iii. Roadways

- The NASP Section 6.17.4 (i) states that “the vehicles design, location and features of vehicle access roads and parking areas allocated in front of the terminal buildings should allow for effective control of traffic flow”.
- Vehicle-proof barricades on pavements and sidewalks outside buildings to allow for the prevention of vehicle borne IEDs from crashing into a building”.

iv. Hold Baggage Screening (HBS) Requirement

The design to include the following facilities for baggage screening:

- Out Of Gauge (OOG) screening and pick up facility.
- Baggage Reconciliation Room.
- Different Screening levels, i.e. separation of level 2 and level 3 screening.
- Secure location for screened baggage.

v. CCTV Surveillance

- The NASP section 6.12.2, CCTV applications states that “Areas of special importance requiring CCTV installations shall include but are not restricted to, all passenger, baggage and cargo handling areas at airports or regulated agent facilities, and access points. CCTV systems installed shall include a time lapse recording capability. All CCTV recording must be retained for a minimum of 30 days under normal operations, in cases where CCTV coverage is the subject of an investigation; the recordings must be retained until such times as approval for their release is given in writing by the Airport Security Manager.

- Airport operators shall deploy CCTV system in monitoring of passenger screening points. In addition to meeting security objectives, CCTV coverage of passenger screening points can facilitate the operational analysis of passenger throughput and possible enhancements, in particular adjustments to staffing levels, to reduce the length of queues".

vi. Enhanced level of protection

- Parking areas must be situated as far as possible from the terminal buildings in case of a bomb attack.
- Short-term parking must be located closer to the terminal building than other parking facilities, with strict control of vehicles.

vii. General security considerations include the following:

- Minimise the number of access points.
- Provide appropriate separate permit holder entrances/exits with an access control system preferably a biometric system to be fitted in all restricted areas, landside/airside boundary.
- Inadmissible passenger facility.
- Control Room (remote screening room)
- Cash in Transit Room.
- Security Supervisor office door to face the CSP.
- Panic alarm system.
- Private search room.
- Emergency Operations Centre (retain existing facility)
- Tray holder for efficiency.
- Staff rest room.
- Parade room.
- Extension of fire detection system.

The Professional Consultant Team will at design development stages obtain from the ACSA Enterprise Security Department any additional security standards which can be used in such a way as to maintain the integrity of the local security programme yet allow sufficient flexibility to achieve a balance between the needs of aviation security, safety, operational requirements and passenger facilitation.

The professional consultant team will be required to sign off non-disclosure agreements prior to handover of ACSA Security requirements and documents for guiding the design development and implementation.

i) Hold Baggage Screening (HBS) Design

The technical design and specification of the baggage handling systems will form part the Project. The professional consultant team will be expected to source all technical considerations as far as it affects their design responsibilities e.g. loadings, dimensions, interfaces etc for the provision of HBS equipment.

j) Technical Installations

The design and construction of specialised electro-mechanical installations is part of the scope and it shall be expected of the architectural and mechanical engineering team to provide adequate and applicable spatial and technical provision, co-ordination and designs for the following technical installations where required by other design consultants or contractors during the design process at large:

- Designs for reticulation for all electrical/electronic/telecom/data equipment required in the envisaged final development.
- Design and specification of Public Address systems.
- Design and specification of CCTV as per ACSA Security Standards.
- Design and specification of communication Antennas.
- Design and specification of the Building Management System (BMS).
- Airport Signage design as per ACSA Signage Manual Guidelines.
- Design and specification of the airport Access control system as per ACSA Security specifications.
- Any other systems & installations that arise in the design process, that is airport security related.

In all of these it shall be expected of the professional consultant team to be innovative in providing a spatial and structural concept that will enhance the installation, maintenance and adaptation of technical systems. In the case of mechanical installations (and Baggage systems), the placing of plant and equipment should be such that all maintenance and repair/replacement can be carried out outside any public areas. Sufficient provision must be made for accessibility to such plant/service areas, especially in the case of vertical circulation being required for the movement of equipment or materials.

Where applicable, spatial provision has been made in the ACSA Concept Design Layout for some of these installations. In these instances, the professional consultant team should maintain the integrity of location and sizing of functional zones in the final design and co-ordinate the provision of interfaces with relevant user clients and/or contractors. Such specific cases where ACSA will provide the design and procurement and the team the necessary co-ordination and integration are the following:

- Baggage conveyor, sorting and delivery systems.
- FIDS (flight information display systems)

k) Roof Design

To a large extent the new roof design will be informed by other considerations following from vertical design and the mixture of existing adjacent constructed areas. Nevertheless, the following additional aspects will have to be considered by the professional consultant team in designing the new roof structures:

- Life cycle considerations, especially ongoing maintenance/cleaning and general durability.

- Architectural considerations such as the creation of volumes of space that supports the general atmosphere and functioning of the terminal.
- The placement of plant or even solar panels on roof level or within roof structure is not precluded, which in turn will inform roof design relating to future servicing, replacement, and accessibility.
- Local weather conditions / patterns e.g. adverse weather conditions (torrential rains, hailstorms, heavy winds, building orientation).
- Civil Aviation Authority guidelines on airport structures.

l) Statutory Regulations

In all design aspects, the building design should comply with all relevant and applicable local or national building regulations. Contractors must comply with health and safety regulations to ensure a safe working environment. This includes obtaining the necessary permits and licenses, implementing safety protocols, providing personal protective equipment (PPE), and conducting regular safety inspections.

Site-Specific Documentation: Contractors need to submit specific documentation and phasing of construction related activities related to the site establishment, which may include:

a) Site Plans and Layouts: Detailed site plans showing the proposed layout, access points, utilities, and other relevant information.
b) Traffic Management Plan: If the site establishment impacts public roads or traffic, a traffic management plan may be required to ensure the safe flow of vehicles and pedestrians. Specific Actions relating to the disruption of the Terminal Accessibility during the realignment of the ring road will be required.

Without limiting any of the requirements set out in this brief, the professional consultant team should ensure compliance with the standards and regulations laid down by the Occupational Safety and Health Act with the aim of submitting final building plans to the relevant authorities for vetting on building, fire protection & escapes compliances.

m) Building Legibility

It is of overriding importance that the building supports the primary passenger flows and is not in opposition to normal passenger behaviour. Therefore, the building should be easily read by occupants and avoid confusion. This will support some of the primary design considerations listed above such as commercial opportunities as well as efficient operations. Moreover, it will arguably reduce the needs for excessive placement of directional signage or operational intervention.

From a layout and flow point of view, it is thus crucially important that vertical circulation elements and major decision points are positioned such that they are highly visible and accessible. They should furthermore support a natural flow of passengers.

n) Ablution Facilities

Provision and quantities of ablution facilities in all areas must be made according to the ultimate design passenger capacity (2MAP) and flows, building population and the requirements of SABS 0400. Based on the outcome(s) during design development iterations, these figures will of course have to be continually revisited with ACSA.

Suitable quantities of Ablution facilities will have to be provided in at least in the following terminal areas:

- Arrivals concourse (Meeters and Greeters area).
- Baggage reclaim hall
- Departure Holding Lounge
- Landside terminal circulation area
- First Floor restaurants
- Viewing Deck
- Airside Facilities
    - Baggage Make-up Areas
    - Airside Office Facilities

Over and above these requirements, separate staff ablutions may be required following the design considerations on separation of public and staff flows.

o) Signage (fixed and variable)

All terminal signage should conform to updated ACSA signage specification documents, this requirement includes any FIDS installations. Statutory signage will have priority preference above all other signage elements in terms of locations, placement and sizing.

p) Finishes

All finishes are to follow a quality standard similar to that achieved in the terminal. The normal considerations related to life cycle costing (e.g. durability, design life etc.) will apply. The finishes of the new and old facilities must integrate. The design team must optimise for re-use of existing finishes which are good and replace what cannot reasonably be kept. The terminal must read as one continuous and seamless experience, in terms of the look and feel of the surface finishes.

q) Theming

The elements recommended as regionalized theming of the terminal building will be recommended by the theming study and the commercial study - at a minimum include elements of the local heritage, in consultation with ACSA for approval. An important element of theming that the professional consultant team must include, is the use of natural light, green spaces and sense of place elements throughout the terminal, both in the existing and new build areas.

r) Requirements for People Living with Disabilities and the Aged

Design provisions for disabled persons and the aged are to be in accordance with the minimum provision of SABS 0400, the provisions recommended by the Societies for the Disabled and/or the Blind, the ACI Handbook on Airports & Persons with Disabilities, IATA ARDM, White Paper on the Rights of Persons with Disabilities and any other relevant design guideline.

The relevant local organizations such as the SA Disability Alliance are to be consulted through the design process to ensure best practice related to the provision of facilities with a universal design in mind. In consultation with the SA Disability Alliance, the installation of Induction Loop Systems in all applicable areas is to be considered for inclusion within the scope of the project.

s) Baggage Trolleys

The terminal design must aim to facilitate the easy use of trolleys by passengers and staff. Therefore, an effort should be made to reduce/eliminate vertical transfers where possible. Provision should be made for dedicated corridors for the circulation of empty trolleys by airport staff in a way that is secure and does not impede on general passenger flow or comfort. It must be endeavoured that these areas should be out of sight of passenger circulation spaces. In addition, layouts of circulation and concourse areas should, where applicable, allow sufficient space for the storage of trolleys. These storage areas should be placed in a manner that it facilitates ease of identification of trolley parking and collection by passengers, whilst not infringing on general circulation. Specific trolley parking/storage areas include:

- Stacking area for trolley collection by arriving passengers upon entry into the baggage claim hall.
- Stacking area for trolley collection by passengers at the kerbside areas prior to entering the terminal building.
- Stacking are for trolley collection by passengers at the parking area prior to entering the terminal building.

t) Furniture and Fittings

The design, procurement, installation and fitting of all furniture and equipment are deemed to be part of the project scope. This is to include but not limited to:

- Terminal Seating:
    - Benches
    - Chairs (with and without armrests)
    - Sofas and lounges
    - Waiting area seating
    - Priority seating for elderly and disabled passengers
- Information Desks and Counters:
    - Airport information desks
    - Ticketing counters
    - Check-in counters
    - Baggage drop-off counters
    - Customs and immigration counters

- Wayfinding and Signage:
    - Directional signage
    - Information boards
    - Gate signage
    - Flight information display systems (FIDS)
- Workstations:
    - Check-in desks
    - Passport control desks
    - Security screening areas
    - Retail and Commercial Spaces:
- Enabling Infrastructure or First Fit for:
    - Retail kiosks and shops
    - Duty-free stores
    - Food and beverage outlets
    - Cafes and restaurants
    - ATMs and currency exchange counters
    - Associated Information and Communication Technology (ICT):
- Charging stations
- Internet and Wi-Fi access points
- Digital displays and advertising screens
- Ablutions:
    - All required fittings eg. sinks and mirrors, hand dryers or paper towel dispensers, luggage storage areas / lockers:
- Miscellaneous:
    - Waste bins and recycling containers
    - Planters and greenery with irrigation
    - Artwork and decorations
    - Flooring and carpets
    - Lighting fixtures (functional and ambiance)

Safety, durability, and comfort should be prioritized when selecting furniture and fittings for the airport terminal. It is essential to comply with applicable regulations and accessibility guidelines to ensure a smooth and inclusive passenger experience. Effort must be made by the professional consultant to ensure 100% local content and production of the above items as per the DTI Local industries, sectors and sub-sectors designation guidelines and further localisation guidelines that will be provided by ACSA.

All furniture and fittings will be informed by the commercial study and will include a variety of options that is not homogenous but are harmonious. Comfort, aesthetics, flexibility durability and ease of

expansion must be of consideration. The seating must compliment the terminal design from a sizing as well as theming point of view.

u) Separation of Staff and Public Flows

Separate entrances, facilities and workplaces for staff should be provided away from public areas to improve security, operational flows and availability of other facilities to the general public and/or passengers. This includes the provision of locker rooms/ staff area, rest rooms and the like. If feasible, a separate staff access point or security point must be identified and recommended for approval by ACSA as part of the project scope.

v) Advertising

Airport advertising represents a significant revenue stream to ACSA. The professional consultant team must make every effort to maximise the potential future revenue opportunities from advertising within the redeveloped terminal building. In ascertaining the advertising revenue potential, the sizes, numbers and locations of advertising positions, the professional consultant team shall closely interact with the ACSA Commercial Division for guidance and approval – this will include incorporating recommendations from the Commercial Study and Theming Study. The professional consultant team must identify advertising areas within the terminal structures that will provide permanent positions of digital advertising screens for approval by the ACSA Commercial Division.

Despite the key objective of providing maximum commercial advertising opportunities, no advertising (in whatever form, location, quantity or size) will be accepted by ACSA if it negatively impacts on any other directional or statutory signage, or if it detracts from the general quality of space, or if it negatively affects the general architectural theme or corporate branding.

CONSTRUCTION HEALTH & SAFETY AGENT:

As outlined in the Scope of Service document in section C3.2, the OHS Agent scope of service will include Asbestos Assessment, HIRA (Pre-construction and during construction) and production of a Health & Safety Specification for pricing at Stage 3 and 4.

Additional Services – Environmental Assessment Practitioner and Environmental Control Officer

a) Environmental Assessment Practitioner:

Appointment of a Professionally registered EAP to assist ACSA with verification of environmental studies and licenses (e.g. WUL) required for the project in terms of analysis of applicable environmental triggers. Where environmental studies are not required, the EAP must liaise with the Environmental Authority and obtain letter of exemption for the project.

Where environmental studies are required, the EAP to proceed with scoping the studies and / or licenses and obtaining necessary approvals from the Environmental Authority on behalf of ACSA.

Compile and provide environmental management plan for the project, including pricing of the plan for inclusion in project budget estimates, Stage 3 reports and BOQ’s.

b) Environmental Control Officer:

Monitoring of implementation of environmental management plans during construction, provision of standard Environmental Compliance Officer (ECO) services, reporting and monitoring during construction period as per the standard scope of service for ECO activities during construction.

Part C3.2: Scope of Service

Construction Health and Safety Agent Services

1. Description of services

Standard Construction Health and Safety Agent services for the George Airport Terminal Expansion project delivered as per the Guidelines for scope of services and Tariff of Fees Guideline in respect of services rendered by persons registered in terms of the South African Council for the Project and Construction Management Professions Act (Act No. 48 of 2000).

1.1. Additional Services

1.1.1. Environmental Assessment Practitioner (EAP)

- Environmental Assessment Practitioner (EAP) to assist ACSA with verification of environmental studies required for the project in terms of analysis of applicable environmental triggers. Where environmental studies are not required, EAP to liaise with the Environmental Authority and obtain letter of exemption for the project.
- Where environmental studies are required, EAP to proceed with scoping the studies / licenses and obtaining necessary approvals from the Environmental Authority on behalf of ACSA.
- Compile and provide environmental management plan for the project, including pricing of the plan for inclusion in project budget estimates and BOQ's.

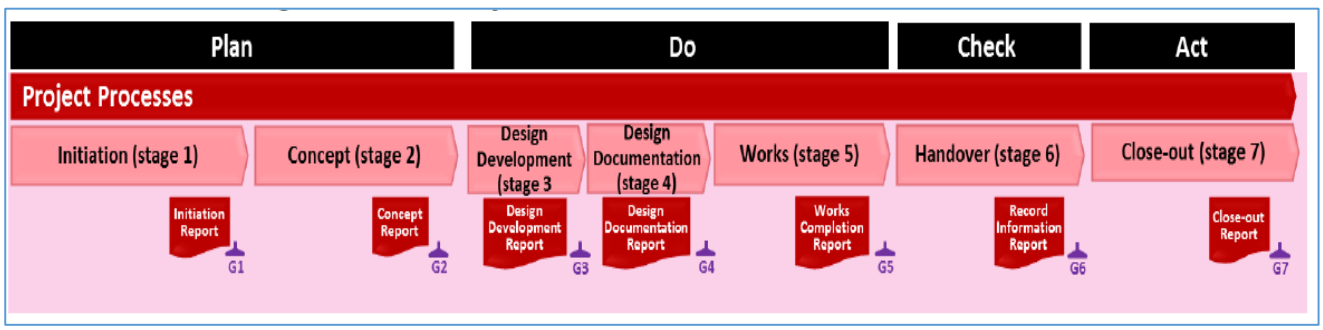
1.1.2. Environmental Control Officer:

- Monitoring of implementation of environmental management plans during construction, provision of standard Environmental Compliance Officer (ECO) services, reporting and monitoring during construction period as per the standard scope of service for ECO activities during construction

2. Extent of the Services

The first phase of the appointment is for the professional team to provide services until SACPCMP Stage 3. It is at this important junction that ACSA will through the Project Sponsor apply for the investment decision for the project. The approval thereof (and notification to commence) will trigger the second phase of service. The second phase being for the professional team to commence with SACPCMP Stage 4: Tender preparation, procurement of the construction team and to monitor and manage the construction team until project close-out (Linked to FIDPM Stages).

The project will be managed as per National Treasury FIDPM. The extent of the appointment is thus from FIDPM Stage 1-7 and implementation in two phases i.e. Phase 1 (FIDPM Stages 1 – 3) and Phase 2 (FIDPM Stages 4 – 7). The Framework for Infrastructure Delivery and Procurement Management (FIDPM) is "primarily focused on governance decision-making points as well as alignment and functions to support good management of infrastructure delivery and procurement processes." All consultants are expected to be aware of the FIDPM processes and are expected to perform their duties in line with these requirements.



Source: The IDM Project Processes (FIDPM,2019)

The services required by the Employer from the Professional Service Providers can be summarized as, but not limited to, the following:

- Provide high-quality technical support and advice to facilitate the initiation, planning, preparation, design, procurement, construction, and contract management, monitoring and reporting on the identified infrastructure projects.
- Implementation of projects in accordance with the FIDPM with particular focus on the planning, preparation, appropriate procurement, construction, monitoring, quality control, cost control, risk identification, risk management and control, co-ordination, and reporting.
- Provide continuous monitoring and reporting on the implementation of project work against baselines and where necessary the formulation of interventions, in consultation with stakeholders, to minimize / eradicate obstacles, delays, cost overruns and schedule slippage. Ensuring that the Contractors and Sub- contractor's technical proposals and drawings confirm with the design and specification requirements.
- Providing all necessary contract administration to monitor the various Contractors/ Sub- contractors diligently and timeously in the execution of the contract works, and in the event of problems being experienced, immediately notify the Clients representatives as the case may be, so that action may be taken.
- The project will entail the relocation of ACSA Operations and 3rd party Coordination to a temporary facility and back to their final location. This movement and the processing of their operations and associated office space, furniture, equipment is a key output and is deemed to be included in the scope of works for the consultant team.
- Visiting the works of relevant Contractors and Suppliers to ensure satisfactory quality control and correct utilization of materials in the fabrication process.
- Whilst most relevant to the Project Manager and the Quantity Surveyor, all service provider must note that they are expected to provide updates and revisions to the budget (or provide support in line with their respective discipline) in parallel to design development throughout the course of the project i.e., as part of ALL 7 individual FIDPM Stage reports. ACSA will require the costs to be presented in a format that will aid decision making where separate BOQ's will be required for different zones and or levels for the proposed development.
- The demolition of the existing infrastructure is a key aspect of the Project. All aspects of the ACSA impairment and retirement procedure is to be included in the scope of the project and is deemed to be a part of the consultant team scope of works. The scope includes the requirement of identifying the assets that are to be demolished and identified for write off. High value assets that are to be disposed are to be identified and included in the BOQ for the Demolition Contractor. The consultant team will play a key role in ensuring the collection of a recoverable amount for an asset's fair value less costs of disposal and its value in use.
- Conduct Asbestos verification and provide Asbestos removal plan / methodology inclusion in tender documents for Main Contractor.
- Compile and provide environmental management plan for the project, including pricing of the plan for inclusion in project budget estimates and BOQ's.
- Conduct Hazard Identification Risk Assessment (HIRA) for all risk between construction work and sensitive operational areas (e.g. Apron and Runway). Workshop the HIRA with all airport stakeholders (Internal & external) to obtain their input and endorsement, including finalising HIRA compilation with the appointed Contractor/s for approval.
- Obtain all of ACSA's OHS, Aviation Safety and Environmental requirements, policies and procedures, Construction Regulations and ensure inclusion of same requirements in all Safety methodologies and the baseline health and Safety Specification.

3. Key Personnel

Should it become necessary to replace any of the key personnel listed during this contract, they may only be replaced by individuals with similar or better qualifications and experience, who satisfies the minimum requirements and then only with the written approval of the Employer. While the bid requirements are for one resource, we expect that the resource will be supported by a full team to make sure that project objectives are met.

4. Use of reasonable skill and care

- The service provider is required to provide all aspects of the service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and to ensure that all legal requirements are met, and that all legal processes are adhered to.
- The Bidders' attention is drawn to the fact that the proposed infrastructure is to be built at an operational airport with substantial aspects of the work to be done on the Airside. Safety of persons and property is of paramount importance, closely followed by the minimization of disruption and inconvenience to passengers. The service provider is to adhere to ACSA Occupational Health and Safety and AVSEC always. No leniency will be granted for breach of policy.

- Access to all Airport Departure and Arrival areas to always remain free of obstruction.

5. Co-operation with other service providers

- In addition to the appointment of professionals, ACSA may also appoint other consultants for delivery of the project.
- The service provider will be required to Liaise with other appointed professional service providers on design, time control and budgetary aspects of the project and reporting on progress and selection of various materials and components on the project.

6. Applicable Standards

- The service provider shall ensure cognisance of, and adherence to all applicable national standards and codes, quality standards, design standards, statutory and audit compliance are taken into consideration in the execution of its work in the design and compilation of specifications for this project.
- Projects will be managed in accordance with the ACSA Project Management Manual and Processes.
- All CAD data must adhere to the standards and requirements set out in the ACSA.
- Timeous submission of all necessary plans and drawings to the relevant Authorities and expedite the necessary approvals and permission to proceed, including any negotiations in this regard.

7. Access to site

- Access to public areas is not restricted, however, personal access permits are required (with criminal checks) for access to restricted areas. The service provider will be required to apply for such personal access permits prior to commencement of project.
- All resources must wear a personal access permit at all times when on site.
- All resources are required to return expired permits or valid permits to ACSA at the completion of the project. Failure to maintain a record of the issue of permits, to return to will lead to the implementation of penalties / and or fines at the discretion of ACSA.

8. Format of communications

- All communications must be in writing by means of letters and e-mails only. Design documentation, drawings, etc. must be in hard copy and electronic format.
- All consultants are to ensure that the flow of information is done on ACSA Approved Platforms i.e. Microsoft Projects, Office 365 etc. All information storage is to be limited to approved file hosting services/ cloud storage solutions such as One Drive, Microsoft Teams and Microsoft 365.
- All information relating to design and documentation created is the sole proprietorship of ACSA.
- All information/ documentation/ reports/ layouts etc. are to be made available in ANY format prescribed by ACSA including editable formats such as CAD (inclusive of AutoCAD and Revit).
    - No file names are to be longer than 25 characters incl. of spaces and hyphens.
    - File names cannot contain the following characters: & " ? < > # {} % ~ / \.
- All final reports must be supplemented with a MS PowerPoint presentation summarizing the main components of each report.

9. Management Meetings

The proposed development represents a major development that is complex and with a large stakeholder base, both within ACSA and externally.

Attendance is required by all Professional Consultants is required of regular meetings, including (but not limited to) progress, design, technical coordination, cost review, risk review, project board and project management meetings which will be scheduled during the life of the projects appointed for.

All reports relevant to the projects, including but not limited to the design reports, monthly progress reports, ad-hoc reports and close out report will be submitted on set project calendar dates or as and when required by the Employer.

It is envisaged that during the Project Implantation the following meetings and attendance (but not limited to) will be required:

- Management Meetings: During the initial stages of this project (Planning, Studies, Investigations and Assessments; Inception; Concept and Viability and Design Development) the service provider may be expected to attend fortnightly Project Board management meetings and progress meetings with the Employer.
- Project Board Meetings
- Design Development Meetings
- Cost and Risk Review Meetings.
- Project and Airport Stakeholder meetings (Monthly and adhoc).
- ACSA Cross Functional Team Meetings.
- The service provider shall be required to attend design development and technical review meetings with the design team and designated representatives of the Employer. These meetings will be structured to gain final approval of the Employer for all design aspects of this work.
- Site/Technical Meetings.
- Adhoc meetings between specific professional consultants and relevant ACSA personnel to facilitate design coordination, design standards, design specification and input & approvals thereof.
- During the Contract Administration and Inspection stage of this project, the service provider shall attend all site meetings with the Employer and contractor present.
- Ad-hoc Meetings: The service provide will be expected to attend ad hoc meetings from time to time, with the Employer, Stakeholder Groups, affected 3rd Party Stakeholders (Local Airport users such as Airlines, Ground Handlers, Retailers, Government Agencies), Airline Industry Committee Working and Steering committees or service or other authorities, to address specific issues as and when the need arises.
- General: The service provider shall be represented at all meetings by the lead-built environment professional or a senior member of staff (with the approval of the ACSA PM).
- The frequency of above meeting is envisaged to be twice a week and on adhoc basis

10. Copyright

- Copyright pertaining to all drawings and documentation for all projects must be ceded to ACSA at the completion of each Stage. Electronic (CAD, PowerPoint and PDF) copies and hard copies shall be issued for all completed stages, including optioneering drawings / designs.

11. Non-disclosure

- All information including design information, annexures and other supporting documentation regarding these projects may not be shared with 3rd parties without written consent of ACSA Procurement and ACSA Legal. All parties and companies involved in this project will be required to sign a non-disclosure at appointment. As part of internal information dissemination, additional non-disclosures from relevant ACSA Divisions shall be signed off by consultants during execution of the project.

12. Insurance Requirements

- For this project, a Professional Indemnity (PI), Aviation Liability and Public Liability insurance covers will be required as per contract data.
- Additional Insurance and Profession Indemnity cover in line with ACSA's Requirements will be requested as and when the bidders are allocated scope of works for pricing of specific projects after they have been appointed.

13. As-Built documentation

- All Consultants appointed for the panel will be required to submit As-Built documents for all projects that get appointed for. At submission of such documents to the Client (s), Consultant will be required to provide written and signed off confirmation that the As-Built drawing information submitted to the Client is a true reflection of what is built on site for the particular project.

14. Contract Termination

The form of contract and associated contract data, Professional Body Recommended Fee Guidelines, Standard Scope of Works are all relevant and will form the basis of appointment and contractual management. In the event of any conflict or

inconsistency between the terms and conditions of this contract and any other documents, including but not limited to the tender document, specifications, exhibits, or attachments, the following clarifications shall take precedence over any contradictions, amendments, or provisions found elsewhere:

The proposed development requirement is directly dependent on:

- Aviation Demand and User Need
- An approved Business Case with an anticipated return on investment.
- The receipt of an investment decision by the ACSA Mandated Authority, Executive Sponsor / and or Executive committee.

In the event of the project no longer being required or the non-receipt of the investment decision, ACSA reserves the right to suspend and or terminate the works and associated appointments at the conclusion of any of the FIDPM Stages. The payment of Termination Fees will be strictly limited to 10% of the remaining stages of the project or as stipulated in the contract. In the event of termination, the 'construction value' used for the determination of termination fees, will be exclusive of escalation and (unapproved/ unallocated) contingencies.

15. Planning & Programming

A program for delivery of the project is required and must be updated at intervals not exceeding 4 weeks. The service provider must also provide input for the other programs as required.

High level estimated duration to achieve completion of each milestone the project are as follows;

Activity	Target Completion date	Notes
Stage 1 & 2	April 2026	Requirement is for the stages to be undertaken in parallel
Stage 3	May 2026	Detail design development
Employers Investment Decision Approval	June 2026	Process for Employer to apply for Investment Capex
Stage 4 (Documentation & Procurement)	August 2026	Tender documentation & Main Contractor procurement process
Stage 5	November 2028	Includes Enablement Works / Decanting
Stage 6	February 2029	ORAT & Handover documentation
Stage 7	February 2030	12 months defects liability period and Close out

The above dates are high level and indicative but can be used to inform assumptions of the tenderers proposed work plan / programme / schedule AND project approach / methodology.

Professional Consultants are to be mindful of the FIDPM requirements for Stage 7 (Close out) pertaining to issuing of Final Completion Certificate. Importantly, ACSA has made it a standard contract requirement that the Defect Liability period is 12 months after Practical Completion, leading to issuing of Final Completion certificate. Therefore, the final retention amount and the final professional fees will be paid subsequent to certification of final completion after 12 months from date of Practical Completion.

It will be required at Stage 1 that professional Consultants produce a work plan that seeks to achieve parallel delivery of the design development stages to achieve programme optimisation, including construction phasing that will improve construction duration and does not result in acceleration costs

Part C4.1: Site Information

Site and Building Concepts

1.1 The site is identified as George Airport.

Part C4.3 - 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 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.

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/Penalties

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.

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 what so ever 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 night time, 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.

Annexure C4.2: ACSA Generic Occupational Health and Safety Specification

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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

This Specification is intended for all ACSA Service Providers.

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 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
   (a) prepares a design;
   (b) checks and approves a design; or
   (c) arranges for any person at work under his or her control to prepare a design
   (d) including an employee of that person where he/she is the employer or
   (e) 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 paragraph10 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. MANDATARY AGREEMENT

A duly signed mandatary 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 plan.

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 exists, 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 effected 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, lockouts 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 bases.
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 professionally 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 1200
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. TEMPORARY WORK

(Construction Regulation 12)

Temporary work must be carried out under the supervision of a competent person designated in writing.
Temporary works structures must be so designed, erected, supported, braced and maintained such that it will be able to support any vertical or lateral loads that may be applied.
No load is to be imposed onto the structure that the structure is not designed to carry.
Temporary works must be erected in accordance with the structural design drawings for that temporary works and, if there is any uncertainty, the designer must be consulted before proceeding with the erection/use of the temporary works.
All design drawings pertaining to the temporary works must be kept available on site.
All equipment used in the erection of temporary works must be checked by a competent person before use.
The foundation or base upon which temporary works is erected must be able to bear the weight and keep the structure stable.
Employees erecting temporary works must be trained in the safe work procedures for the erection, moving and dismantling of temporary works.
Safe access/egress (and emergency escape) must be provided for workers.
A competent person must inspect temporary works structures that have been erected before, during and after pouring of concrete or the placing of any other load and thereafter daily until the temporary works is stripped.
The results of all inspections must be recorded in a register kept on site.
The temporary works must be left in place until the concrete has reached sufficient strength to bear its own weight plus any additional weight that may be imposed upon it and not until the designated competent person has authorised its stripping in writing.
Any damaged temporary works must be repaired/rectified immediately Deck panels must be secured against displacement.
The contractor must ensure that no employee is exposed, or required to work on slippery and dangerous surfaces.
Person's health must be protected when use is made of solvents, oils or other similar substances.
Ensuring that the OEL (Occupational Exposure Limit) for any substances that they may be exposed to does not exceed the legal limits and that the necessary PPE is used.

23. 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. DEMOLITION WORK

(Construction Regulation 13)

The Principal Contractor must ensure that a detailed structural engineering survey is conducted by a competent person and a method statement on the procedure to be followed is provided to ACSA Safety.

The Principal Contractor must ensure that demolition work is conducted under the supervision of a competent person appointed in writing.
The Principal Contractor must ensure that safety precautionary measures stipulated in Asbestos Regulations is adhered to if demolition work involves asbestos material and that asbestos work is conducted under the supervision of a registered Asbestos Principal Contractor.

25. 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 always used and fixed to the structure. (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.

26. SUSPENDED PLATFORMS

(Construction Regulation 17)

The Contractor to design, erect, use and maintain suspended platforms in accordance with the requirements of Construction Regulation 17.

27. EXPLOSIVE ACTUATED FASTENING DEVICES

(Construction Regulation 21)

Every Explosive Powered Tools (EPT) must be:

- Provided with a guard around the muzzle to confine flying fragments or particles
- A firing mechanism that will prevent the EPT from firing unless it is pushed against the surface and at a right angle (where the EPT is fitted with an intermediate piston between the charge and the nail this requirement is waived)
    - The Contractor or user must ensure that:
    - Only the correct type of cartridge is used (product specific)
    - The EPT is cleaned and inspected daily before use by an appointed competent person who maintains a register with the findings of his inspection and the details of cleaning, service and repairs
    - The safety devices are in good working order before the EPT is used
    - When the EPT is not being used it is stored in an unloaded condition together with the cartridges in a safe/secure place inaccessible to unauthorised persons
    - A warning notice is displayed at the point where the EPT is in use
    - The issue and return of cartridges must be controlled by maintaining the issue/returns register signed by both issuer and user and empty cartridge cases must be returned with unspent cartridges.
    - Users/operators of the EPT have received the necessary training and have been authorised as being competent to use/operate the EPT
    - Users/operators must wear the prescribed PPE whilst using/operating the tool

28. 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.

29. 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.

30. 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/operators 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.

31. ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES

(Construction Regulation 24)

The Principal Contractor must, in addition to compliance with the Electrical Installation Regulations, 2009, and the Electrical Machinery Regulations, 1988, promulgated by Government Notice No. R. 1593 of 12 August 1988, ensure that—
(a) before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
(b) all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
(c) the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
(d) all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
(e) all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.
The Principal Contractor must ensure that prior notice is given to ACSA Electrical Department of any work involving electrical installation. A lock-out certificate must be issued to the relevant Principal Contractor. The Principal Contractor must ensure that a lock-out procedure is adhered to by his/her employees whenever required. The Principal Contractor must ensure that safety measures stipulated in the Electrical Installation Regulations, Machinery Regulations, General Machinery Regulations and Construction Regulations are adhered to at all times.

32. USE AND TEMPORARY STORAGE OF FLAMMABLE LIQUIDS ON CONSTRUCTION SITES
(Construction Regulation 25)
The Principal Contractor to ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present.
- No flammable substance is used or applied e.g. in spray painting, unless in a room or cabinet or other enclosure specially designed and constructed for that purpose, unless due to imposed controls that the ventilation provided is sufficient to ensure that the Lower Explosive Limit and Lower Fire Limit are not exceeded. Furthermore, that the risk assessments are reviewed to ensure that all the related hazards have been addressed and that adequate P.P.E. is provided.
- The workplace is effectively ventilated. Where this cannot be achieved:
- Employees must wear suitable respiratory equipment
- No smoking or other sources of ignition is allowed into the area
- The area is conspicuously demarcated as "flammable materials”
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container approved by the local Fire Department, cage or room that is kept locked with access control measures in place and sufficient firefighting equipment installed and fire prevention methods practised e.g. proper housekeeping
- Flammables stored in a permanent flammables store are stored so that no fire or explosion is caused i.e.: stored in a locked well-ventilated reasonably fire-

resistant container, cage or room conspicuously demarcated as "Flammable Store -No Smoking or Naked Lights"
- Adequate and suitable firefighting equipment installed around the flammables store and marked with the prescribed signs
- All electrical switches and fittings to be of a flameproof design, or where necessary, intrinsically safe.
- Any work done with tools in a flammables store or work areas to be of a non-sparking nature
- No Class A combustibles such as paper, cardboard, wood, plastic, straw etc. to be stored together with Flammables
- The flammable store to be designed and constructed so that in the event of spillage of liquids in the store, it will contain the full quantity + 10% of the amount liquid stored.
- Where the use of Bulk Storage facilities is contemplated, the contractor must ensure compliance to the local Authority bylaws.
- A sign indicating the capacity of the store to be displayed on the door
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas
- Metal containers to be bonded to earth whilst decanting to prevent build-up of static electricity
- Welding and other flammable gases to be stored and segregated as to type of gas and empty and full cylinders
- All permanently installed storage facilities to comply with SANS 10089.

33. 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.

34. 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.

35. 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.

36. 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.

37. 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.

38. 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.

39. 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.

40. 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.

41. NIGHT WORK

The Principal Contractor must ensure that necessary arrangements have been made with ACSA before conducting any night work and that there is adequate lighting for any work to be conducted and failure to do so will result in work being stopped.

42. 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.

43. 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

44. ROAD CONSTRUCTION WORK

The Principal Contractor must ensure that construction work conducted on the public road all necessary caution signage, cones, flag man etc. are provided as stipulated in the Road Traffic Ordinance is adhered to. The caution signage to be conspicuously displayed to warn the drivers of any construction work ahead must be provided at least at 75 m away from the cones; flag man; actual construction work etc.

45. 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.

46. BATCH PLANTS

Should a batch plant be used, it must conform to the requirements as set out on Construction Regulation (February 2014) of OHS Act 85/93. These must include but not limited to appointment of a competent person to operate and supervise batch plant operations.

47. 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.

48. 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.

49. 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.

50. 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 OHSACT 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 to the risks identified.
- Failure to disclose or report first aid cases and /or minor/major/fatalities as prescribed by the OHSACT.
- 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)

Annexure C5.2: OCCUPATIONAL HEALTH AND SAFETY MANDATARY AGREEMENT

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

OBJECTIVES

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

1. The Occupational Health & Safety (Act 85 of 1993), as amended and its regulations and
2. The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993) also known as the (COID Act).
3. Construction Regulations 2014

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

The parties to this Agreement are:

Name of Organisation: **AIRPORTS COMPANY SOUTH AFRICA "ACSA"**
Physical Address: **Airport Company South Africa** **Western Precinct, Aviation Park, O.R. Tambo International Airport, 1 Jones Road, Kempton Park, Gauteng, South Africa, 1632** **P O Box 75480, Gardenview, Gauteng, South Africa, 2047**

Hereinafter referred to as "Client"

Name of organisation:
Physical Address

Hereinafter referred to as "the Mandatary/ Principal Contractor"

MANDATARY'S MAIN SCOPE OF WORK

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1. Definitions

1.1 "Mandatary" is defined as an agent, a principal contractor or a contractor for work, or service provider appointed by the Client to execute a scope of work on its behalf, but WITHOUT

DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant.

1.2 “Client” refers to ACSA;

1.3 “Parties” means ACSA and the Contractor, and “Party” shall mean either one of them, as the context indicates;

1.4 "Services" means the services provided by the Contractor or Stakeholder to ACSA;

1.5 “Stakeholder” refers to companies conducting business at ACSA premises or within close proximity where there is an interface with ACSA operations;

1.6 “The OHS Act” refers to Occupational Health and Safety Act 85 of 1993, as amended;

“The COID Act” refers to Compensation for Occupational Injuries and Diseases Act 61 of 1997, as amended; and

1.7 “SHE” means Safety, Health and Environment.

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

a) The Occupational Health & Safety Act comprises of SECTION 1-50 and all unrepealed REGULATIONS promulgated in terms of the former Machinery and Occupational Safety Act No.6 of 1983 as amended as well as other REGULATIONS which may be promulgated in terms of the Act and other relevant Acts pertaining to the job in hand.

b) Section 37 of the Occupational Health & Safety Act potentially punishes Employers for unlawful acts or omissions of Mandatories where a Written Agreement between the parties

has not been concluded containing arrangements and procedures to ensure compliance with the said Act BY THE MANDATORY.

c) All documents attached or refer to in the above Agreement form an integral part of the Agreement.

d) To perform in terms of this agreement Mandataries must be familiar and conversant with the relevant provisions of the Occupational Health & Safety Act 85 of 1993 (OHS Act) and applicable Regulations.

e) Mandatories who utilise the services of other contractors must conclude a similar Written Agreement with those companies.

f) Be advised that this Agreement places the onus on the Mandatary to contact the CLIENT in the event of inability to perform as per this Agreement.

g) This Agreement shall be binding for all work the Mandatory undertakes for the Client and remains in force for the duration of the contracted period as per Main Contract signed by both parties.

h) The contractor shall submit all necessary documentation as per SHE File Index to the Client seven days prior to starting with any work,.

THE UNDERTAKING

The Mandatory undertakes to comply with:

2. REPORTING

The Mandatary and/or his / her designated person shall report to the Client prior to commencing any work at the airports as well as when the activities change from the original scope of work.

3. WARRANTY OF COMPLIANCE

3.1 In terms of this agreement the Mandatary warrants that he / she agrees to the arrangements and procedures as prescribed by the Client and as provided for in terms of Section 37(2) of the OHS Act for the purposes of compliance with the Act.

3.2 The Mandatary further warrants that he / she and / or his / her employees undertake to maintain such compliance with the OHS Act. Without derogating from the generality of the above, or from the provisions of the said agreement, the Mandatary shall ensure that the clauses as hereunder described are at all times adhered to by himself / herself and his / her employees.

3.3 The Mandatary hereby undertakes to ensure that the health and safety of any other person on the premises is not endangered by the conduct of his / her activities and that of his / her employees.

4. SHE Risk Management

4.1 The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will include identification of hazards and risk, analysis and evaluation of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.

4.2 The Mandatary shall review the risk registers as and when the scope of work changes and keep the latest version on the SHE File.

5. MEDICAL EMERGENCY RESPONSE

The Mandatary shall submit a detailed emergency response procedure to the Client OHS Department as part of the SHE File prior to start of work. The procedure shall stipulate how the Mandatary intends to attend to medical emergencies. In the sites where the Client has onsite clinic services, the medical staff can provide first line response and stabilise the patient however the Mandatary shall then activate its own

medical response procedure and transport the patient to the medical facilities for further medical attention.

6. APPOINTMENTS AND TRAINING

6.1 The Mandatary shall appoint competent persons as per Section 16(2) of the OHS Act. Any such appointed person shall be trained on any occupational health and safety matter and the OHS Act provisions pertinent to the work that is to be performed under his / her responsibility. Copies of any appointments and certificates made by the Mandatary shall immediately be provided to the Client.

6.2 The Mandatary shall at the beginning of the project or activities where there are 5 people and more people working appoint a full time dedicated Health and Safety resource whom will be dedicated to the project to ensure that Safety, Health and Environmental Requirements are met at all times. The allocated resource shall be based where the project is undertaken for the duration of the project or scope of work execution. The resource shall be trained and qualified on Occupational Health and Safety matters and the OHS Act provisions pertinent to the work that is to be carried out.

6.3 The Mandatary shall further ensure that all his / her employees are trained on the health and safety aspects relating to the work and that they understand the hazards associated with such work being carried out on the airports. Without derogating from the foregoing, the Mandatary shall, in particular, ensure that all his / her users or operators of any materials, machinery or equipment are properly trained in the use of such materials, machinery or equipment.

6.4 Notwithstanding the provisions of the above, the Mandatary shall ensure that he / she, his / her appointed responsible persons and his / her employees are at all times familiar with the provisions of the OHS Act, and that they comply with the provisions of the Act.

6.5 The Mandatary shall at all material times be responsible for all costs associated with the performance of its own obligations and compliance with the terms of this Agreement, unless otherwise expressly agreed by the Parties in writing.

7. SUPERVISION, DISCIPLINE AND REPORTING

7.1 The Mandatary shall ensure that all work performed on the Clients premises is done under strict supervision and that no unsafe or unhealthy work practices are permitted. Discipline regarding health and safety matters shall be strictly enforced against any of his / her employees regarding non-compliance by such employee with any health and safety matters.

7.2 The Mandatary shall further ensure that his / her employees report to him / her all unsafe or unhealthy work situations immediately after they become aware of the same and that he / she in turn immediately reports these to the Client within 48 hours with the action taken to mitigate the risk.

7.3 Where the hazard or risk identified is the responsibility of the Client to action, the Mandatary shall notify the Client OHS and Safety Department within 24 hours of becoming aware of the hazard or risk for prompt action to mitigate.

8. COOPERATION

8.1 The Mandatary and his/her employees shall provide full co-operation and information if and when the Client or his / her representative enquires into occupational health and safety issues concerning the Mandatary. It is hereby recorded that the Client and his / her representative shall at all times be entitled to make such an inquiry.

8.2 Without derogating from the generality of the above, the Mandatary and his / her responsible persons shall make available to the Client and his / her representative, on request, all and any

checklists and inspection registers required to be kept by him / her in respect of any of his / her materials, machinery or equipment and facilities.

9. WORK PROCEDURES

9.1 The Mandatary shall, after having established the dangers associated with the work performed, develop and implement mitigation measures to minimize or eliminate such dangers for the purpose of ensuring a healthy and safe working environment.

9.2 The Mandatary shall then ensure that his / her responsible persons and employees are familiar with such mitigation measures. This includes the lock out tag out processes relating to the use of machinery.

9.3 The Mandatary shall implement any other safe work practices as prescribed by the Employer and shall ensure that his / her responsible persons and employees are made conversant with and adhere to such safe work practices.

9.4 The Mandatary shall ensure that work for which a permit is required by the Employer or any statute is not performed by his / her employees prior to the obtaining of such a permit.

10. HEALTH AND SAFETY MEETINGS

10.1 OHS Act requires that Health and Safety Committees be established in case where employee count exceeds 20 onsite, however due to the duration and the nature of the scope of work executed by the contractors and stakeholders enforces that regardless of employees at the airports. The Mandatary shall establish his / her own health and safety committee(s) and ensure that his / her employees, being the committee members, hold health and safety representatives to attend the Employer's health and safety committee meetings on monthly basis or quarterly whichever is applicable as per contractor requirement.

10.2 The Mandatary Section 16(2) appointed and SHE resource shall attend the Client SHE meetings as per the schedule communicated. In cases where the Mandatary delegated resources are not able to attend the meeting, an apology shall be submitted to the Client OHS Manager 24 hours before the meeting. An alternative representative shall be deployed to attend the meeting on the half of the Mandatary.

10.3 The Mandatary appointed Section 16(2) and SHE resource shall not skip more than three SHE Committee meetings a year.

11. COMPENSATION REGISTRATION/INSURANCE

11.1 The Mandatary warrants that all their employees and/or their contractor's employees if any are covered in terms of the COID Act, which shall remain in force whilst any such employees are present on the Client's premises. A letter is required prior commencing any work on site confirming that the Principal contractor or contractor or stakeholder is in good standing with the Compensation Fund or Licensed Insurer.

11.2 The Mandatary warrants that they are in possession of the following insurance cover, which cover shall remain in force whilst they and /or their employees are present on the Client's

premises, or which shall remain in force for that duration of their contractual relationship with the Client, whichever period is the longest.

11.3 The Mandatary shall provide the Client with Public Liability Insurance Cover as required by the Main Contract

11.4 Any other Insurance cover that will adequately makes provision for any possible losses and/or claims arising from their and /or their Subcontractors and/or their respective employee's acts and/or omissions on the Client's premises.

11.5 The Mandatary shall send updated Letter of Good Standing to the Client as and when the Mandatary receives it to ensure that the most valid version is available.

12. MEDICAL EXAMINATIONS

12.1 The Mandatary shall ensure that all his / her employees undergo routine medical examinations and that they are medically fit for the purposes of the work they are to perform.

12.2 Copies of such medical fitness certificates shall be made available to Client as part of the SHE file for review to ensure that they have been conducted by a reputable Occupational Health Practitioner registered with Health Professions Council of South Africa (HPCSA) as a doctor and specialist Occupational Medical Practitioner. Any other additional medical assessment shall be conducted in line with risk exposures.

12.3 Standard (Basic) medical tests shall constitute the following assessments as minimum:

- Individual's history of general and previous occupational health
- Comprehensive physical examination for evaluation of systemic function
- Blood Pressure Measurement
- Weight, Height and Body Mass Index
- Urine screening
- Drug screening
- Audio screening
- Lung Function Test
- Keystone eye test
- Work at Height Questionnaire
- Muscular skeletal questionnaire

13. INCIDENT REPORTING AND INVESTIGATION

13.1 All Safety, Health and Environmental Incidents shall be reported to the Client OHS and Safety Department within two hours from the time of occurrence via a phone call, sms or email or before end of shift. This shall be followed by a formal report in a form of a preliminary report within forty eight (48) hours.

13.2 All incidents referred to in Section 24 of the OHS Act shall be reported by the Mandatary to the Department of Labour and copies of such reporting to be sent to the Client. The Mandatary

shall further provide with copies of any written documentation and medical reports relating to any incident.

13.3 The Client retains an interest in the reporting of any incident as described above as well as in any formal investigation and/or inquiry conducted in terms of section 32 of the OHS-Act into such incident.

13.4 The Client reserves a right to hold its own investigation into any incident where it deems it is not satisfied with the incident investigation or where the severity of the incident is fatal or damage beyond a value of R1 million and above.

14. SUBCONTRACTORS

14.1 The Mandatary shall notify the Client of any subcontractor he / she may wish to source to perform work on his / her behalf on the Client premises. It is hereby recorded that all the terms and provisions contained in this clause shall be equally binding upon the subcontractor prior to the subcontractor commencing with the work. Without derogating from the generality of this paragraph:

14.2 The Mandatary shall ensure that the sub-contractor meets all the requirements and is competent for the scope of work contracted for. This includes that approval of the SHE file, SHE Plans associated with the work.

15. SECURITY AND ACCESS

The Mandatary shall request and familiarise its employees with the Client security rules which is not included in this agreement.

16. FIRE PRECAUTIONS AND FACILITIES

16.1 The Mandatary shall ensure that all his / her employees are familiar with fire precautions at the site(s), which includes fire-alarm signals and emergency exits, and that such precautions are adhered to.

16.2 This includes participating on planned and unplanned emergency drills organised the Client.

17. FACILITIES

The Mandatary shall have a program to upkeep and maintain the facilities leased out to it by the Client as stipulated on lease agreement.

18. HYGIENE AND CLEANLINESS

The Mandatary shall ensure that the work site, ablution, offices and surround area is at all times maintained to the reasonably practicable level of hygiene and cleanliness. In this regard, no loose materials shall be left lying about unnecessarily and the work site shall be cleared of waste material regularly and on completion of the work.

19. INTOXICATION AND SUBSTANCE ABUSE

19.1 Entry to the airside is subjected to Aviation Safety Requirements in line with Client Substance Abuse Policy. No intoxicating substance of any form shall be allowed on site where airside or land side. Any person suspected of being intoxicated shall not be allowed on the site.

Any person required to take medication shall notify the relevant responsible person thereof, as well as the potential side effects of the medication.

19.2 The Client reserves a right to do substance abuse testing and main entry points for the Mandatary employees.

19.3 Intoxication limits shall be adhered to as stipulated on Client Substance Abuse Policy.

19.4 Records of substance abuse testing shall be filed on the SHE File and made available to the Employer on request.

20. PERSONAL PROTECTIVE EQUIPMENT

20.1 The Mandatary shall ensure that his / her responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform and in accordance with the requirements of General Safety Regulation 2 (1) of the OHS Act. The Mandatary shall further ensure that his / her responsible persons and employees wear the PPE issued to them at all times.

20.2 The Mandatary shall monitor compliance to PPE of his/her own employees at all times, The Client can at its discretion conduct random PPE compliance inspections and these can be recorded officially on the Client non-conformance reporting tool.

20.3 The Mandatary shall keep records PPE Control cards of each employee those shall be kept on SHE File.

21. PLANT, MACHINERY AND EQUIPMENT

21.1 The Mandatary shall ensure that all the plant, machinery, equipment and/or vehicles he / she may wish to utilize on the Client premises is/are at all times of sound order and fit for the purpose for which it/they is/are attended to, and that it/they complies/comply with the requirements of Section 10 of the OHS Act.

21.2 Where the Mandatory's equipment interfaces to the Client's equipment's, a joint risk assessment shall be conducted by the Mandatary and the Client OHS department in order for the risks to be mitigated prior to the use of such equipment's. It is the responsibility of the Mandatary to notify the Client OHS department of such equipment's and machinery.

21.3 In accordance with the provisions of Section 10(4) of the OHS Act, the Mandatary hereby assumes the liability for taking the necessary steps to ensure that any article or substance that it erects or installs at the sites, or manufactures, sells or supplies to or for the Client, complies with all the prescribed requirements and will be safe and without risks to health and safety when properly used.

22. USAGE OF THE CLIENT'S EQUIPMENT

22.1 The Mandatary hereby acknowledge that his / her employees are not permitted to use any materials, machinery or equipment of the Employer unless the prior written consent of the Client has been obtained, in which case the Mandatary shall ensure that only those persons authorized to make use of same, have access thereto.

22.2 The Client shall ensure that it isolates and apply LOTO on any equipment's and machinery where there is an unexpected start up or flow of energy. The Mandatary has a

responsibility to apply its own LOTO procedures before starting with work and post the use of the equipment and machinery.

23. PERMIT MANAGEMENT

23.1 The Mandatary shall ensure that work for which the issuing of permit to work is required shall not be performed prior to the obtaining of a duty completed approved permit by the Client or relevant Authority.

23.2 In the context of the Client, the following activities are regarded as high risk activities and a permit to work shall be obtained prior to starting with the activities at any site:

- Cold Works Permit
- Hot Work Permit
- Confined Space Entry Permit
- Work At Heights Permit

24. TRANSPORTATION

24.1 The Mandatary shall ensure that all road vehicles used on the sites are in a roadworthy condition and are licensed and insured. All drivers shall have relevant and valid driving licenses and vehicle shall carry passengers unless it is specifically designed to do so. All drivers shall adhere to the speed limits and road signs on the premises at all times.

24.2 No employees on premises permitted in back of LDV (bakkie) and in front of LDV each driver and passenger must have a separate seat belt.

24.3 In the event that any hazardous substances are to be transported on the premises, the Mandatary shall ensure that the requirements of the Hazardous Substances Act 15 of 1973 are complied with fully all times.

25. CLARIFICATION

In the event that the Mandatary requires clarification of any of the terms or provisions of this agreement, he / she should contact the Client OHS Department.

26. DURATION OF AGREEMENT

This agreement shall remain in force for the duration of the work to be performed by the Mandatary and/or while any of the Mandatary's employees are present on the Client site.

27. NON COMPLIANCE WITH THE AGREEMENT

If Mandatary fails to comply with any provisions of this agreement, the Client shall be entitled to give the Fourteen (14) days' notice in writing to remedy such non-compliance and if the Mandatary fails to comply with such notice, then the Client shall forthwith be entitled but not obliged, without prejudice to any other rights or remedies which the Mandatary may have in law,

- Apply penalties as stipulated on the matrix below; or
- to claim immediate performance and/or payment of such obligations.
- Should Mandatary continue to breach the contract on three occasions for the same deviation, then the Client is authorised to suspend the main contract without complying with the condition stated in clause above.

28. INDEMNITY

The Mandatary hereby indemnifies the Client against any liability, loss, claims or proceedings whatsoever, whether arising in Common Law or by Statute; consequent personal injuries or the death of

any person whomsoever (including claims by employees of the Mandatary and their dependents); or consequent loss of or damage to any moveable or immoveable property arising out of or caused by or in connection with the execution of the Mandatary's contract with the Client, unless such liabilities, losses, claims or proceedings whatsoever are attributable to the Client's faults. The Mandatary or his/her employees is liable to prove without reasonable doubt that the loss is due to the Client's fault or negligence.

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993

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

a) All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
b) The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHS Act 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
c) The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHS Act 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.

29. FURTHER UNDERTAKING

Only a duly authorised representative appointed in terms of Section 16.2 of the OHS Act is eligible to sign this agreement on behalf of the Mandatary. The signing power of this representative must be designated

in writing by the Chief Executive Officer of the Mandatary. A copy of this letter must be made available to the Client.

ACCEPTANCE BY MANDATARY

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

I …….a duly authorised 16.2 Appointee acting for and on behalf of ……..(company name) undertake to ensure that the requirements and the provision of the OHS Act 85 of 1993 and its regulations are complied with.

Mandatary – WCA/ Federated Employers Mutual No…….

Expiry date …….

_____ _____
SIGNATURE ON BEHALF OF MANDATARY **DATE**
(Warrant his authority to sign)

Witnesses:

1. _____

2. _____

_____ _____
SIGNATURE ON BEHALF OF THE CLIENT **DATE**
AIRPORT COMPANY SOUTH AFRICA

Witnesses:

3. _____

4. _____

Annexure C5.3: ACSA Baseline Hazard identification risk assessment (HIRA)

Baseline Risk Assessment	
Project Name	Terminal Expansion at George Airport
Document Number: HIRA 1	Revision Number: 001

1. Risk assessment of the Project

Risk Severity Definition	**Description: Consequences (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 minor equipment damage**	**Large reduction in safety margins, a reduction in the ability of 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**

2. Generic Hazard Assessment of the Project

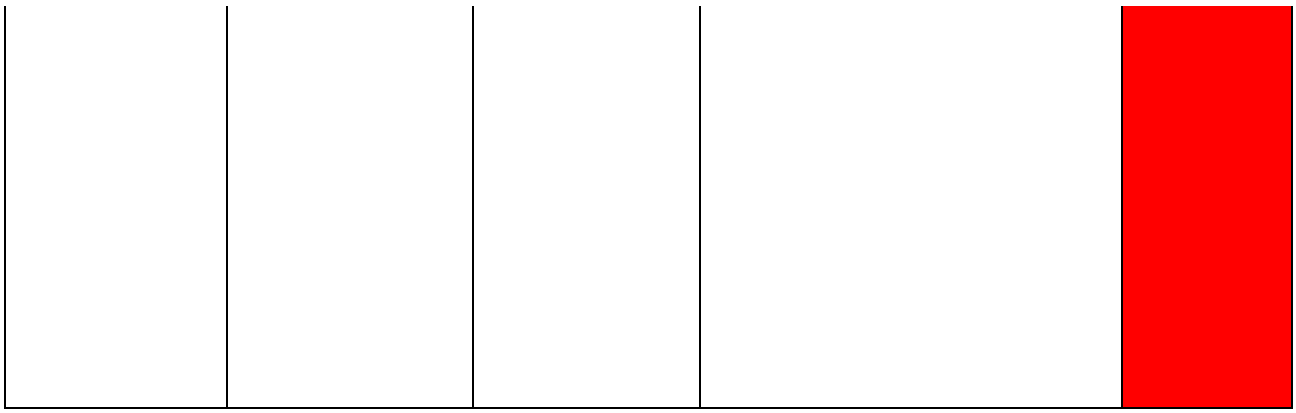
Likelihood Probability	Description	Examples of what to look out for…
Category 1	Extremely Improbable (Rare)	Almost inconceivable that the event shall occur
Category 2	Improbable (Seldom)	Very unlikely that the event shall occur. It is not known that it has ever occurred before
Category 3	Remote (Unlikely)	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

Required to Complete a Generic Hazard Assessment of the Project

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 effected 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
Crane operations	Height of crane	Flight path obstruction/collision with aircraft	30 meter height restriction procedure – refer to Airfield Operation Department for further information	2A
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	Working at Height	Injury /fatality	Fall protection plan to be devised by the contractors in line with the Construction Regulations 2014. Rescue plans are to be included	3A
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 or 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
Golf carts	Misuse of golf carts	Injuries and property damage	Contractor staff to be aware of golf cart movements on the Landside. Golf cart use for airport users only and not for contractor use for transporting materials. Golf cart operate in predetermined routes – contractors to be aware thereof	3D
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 to be used to transport heavy items in the Parkade	4C

Annexure 5.4: 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 Airports Company South Africa SOC Limited. The Company 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	Environmental Policy shall be communicated, comprehended and implemented by all appointed contractor staff (refer to Environmental Management Policy T010 001P).
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 the Company 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 Company 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 not be feasible. • Under no circumstances shall solid or liquid waste be dumped, buried or burnt. • Contractors shall always maintain a tidy, litter free environment 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 to 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 the Company 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	The Company 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.
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 the Company 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 the Company accordingly.

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

Penalties 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 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 Airports Company South Africa SOC Limited'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).

ANNEXURE C5.5: POPIA AGREEMENT

CONFIDENTIALITY AND DATA PROTECTION

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

or use such information for its own purpose or for any purposes other than those related to the implementation of this Agreement.
The obligations of confidentiality in this clause shall not apply in respect of the disclosure or use of such information in the following circumstances:
in respect of any information which is previously known by such Party (other than as a result of any breach or default by any Party or other person of any agreement by which such Confidential Information was obtained by such Party);
in respect of any information which is in the public domain (other than as a result of any breach or default by either Party);
any disclosure to either Party's professional advisors, executive staff, board of directors or similar governing body who (i) such Party believes have a need to know such information, and (ii) are notified of the confidential nature of such information and are bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;
any disclosure required by law or by any court of competent jurisdiction or by any regulatory authority or by the rules or regulations of any stock exchange;
any disclosure made by a Party made in accordance with that Party's pursuit of any legal remedy;
any disclosure by a Party to its shareholders or members pursuant to any reporting obligations that Party may have to its shareholders or members, provided that each such shareholder or member is notified of the confidential nature of such information and is bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;
In the event that a Party is required to disclose confidential information as contemplated in this clause, such Party will:
advise any Party/ies in respect of whom such information relates (the "**Relevant Party/ies**") in writing prior to disclosure, if possible;
take such steps to limit the disclosure to the minimum extent required to satisfy such requirement and to the extent that it lawfully and reasonably can;
afford the Relevant Party/ies a reasonable opportunity, if possible, to intervene in the proceedings;
comply with the Relevant Party/ies' reasonable requests as to the manner and terms of such disclosure; and
notify the Relevant Party/ies of the recipient of, and the form and extent of, any such disclosure or announcement immediately after it was made.
Either Party may, by notice in writing, be entitled to demand the prompt return of the whole or any part of any confidential information supplied by it to the other Party, and each Party hereby undertakes to comply promptly with any such demand.
In line with the provisions of Protection of Personal Information Act, No 4 of 2013 (POPIA), particularly section 20 and 21, the service provider (referred to as Operator in POPIA) shall observe the following

principles when processing personal information on behalf of the Company (referred to as Responsible Party in POPIA):
the Service Provider shall only act on the Company's documented instructions, unless required by law to act without such instructions;
the Service Provider shall ensure that its representatives processing the information are subject to a duty of confidence;
the Service Provider shall take appropriate measures to ensure the security of processing. The Service Provider shall ensure and hereby warrants that they have minimum IT and or physical security safeguard to protect personal information;
the Service Provider shall notify the Company immediately where there are reasonable grounds to believe that the personal information of a data subject has been accessed or acquired by any unauthorised person;
the Service Provider shall only engage a sub-operator with the Company's prior authorisation and under a written contract;
the Service Provider shall take appropriate measures to help the Company respond to requests from data subjects to exercise their rights;
taking into account the nature of processing and the information available, the Service Provider shall assist the Company in meeting its POPIA obligations in relation to the security of processing, the notification of personal information breaches and data protection impact assessments;
the Service Provider shall delete or return all personal information to the Company (at the Company's choice) at the end of the contract, and the service provider shall also delete existing personal information unless the law requires its storage; and
the Service Provider shall submit to audits and inspections. The Service Provider shall also give the Company whatever information it needs to ensure that the Parties meet their Section 20(1) obligations.

1. SIGNATURES

FOR AIRPORTS COMPANY SOUTH AFRICA

THUS DONE AND SIGNED AT _____ON THIS_____DAY OF _____2025.

_____

FOR SERVICE PROVIDER

THUS DONE AND SIGNED AT _____ON THIS_____DAY OF _____2025.

AUTHORIZED SIGNATORY _____

ANNEXURE 1: ACSA INSURANCE SCHEDULE

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

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

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

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

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

Section 1 Of The Policy – Contract Works

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

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

This insurance contains the following limitations and warrantees ;

Open Trench Limitation

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

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

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

Section II of the Policy – Contractors Public Liability

Public Liability Insurance which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property(other than the Works the subject matter of this Contract) arising from the execution of the Contract with a limit of indemnity of **R100,000,000** in respect of any one occurrence or series of occurrences consequent on or attributable to one source or original cause.

Section III of the Policy – Removal Of Lateral Support Liability

Removal Of Lateral Support Liability which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the Works the subject matter of this Contract) arising out of or in connection with shock or vibration or the removal or weakening of or interference with support to property in the vicinity of the Contract Site and arising out of or in connection with the Insured Contract (but not in respect of tunneling works) and occurring during the Period of Insurance.
The Limit of Indemnity being limited to R50,000,000 attributable to one source or original cause
b. Contract Works SASRIA – Providing physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works as covered by the underlying Contract Works policy as noted in (a) above due to perils as covered in terms of the SASRIA Contract Works wording as issued by SASRIA SOC.
The Contract Works SASRIA cover excludes consequential or indirect loss or damage of any kind or description whatsoever.

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

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

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

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

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

The Policy only covers the rectification of the works and excludes all consequential losses. Professional Duties do not include:

a) Labour and construction work which would normally be the responsibility of the building or engineering contractor.

b) Supervision of the construction works usually undertaken by a building or engineering contractor.

1. 2 The **Contractor** shall familiarise itself fully with the details of such insurance effected by the Employer. The Contractor shall comply to all the terms and conditions of the Employer arranged policies and the Contractor shall be deemed to be fully aware of all the conditions, limits, limitations, exclusions/exceptions and deductibles that are contained in the Employer arranged policies. Copies of the Employer arranged policies are obtainable on request from the Employer and if the Contractor is of the opinion that additional insurance is required, such shall be for the Contractors account.

1.3 The Employer shall pay the premium in connection with the insurances effected by the Employer. The Employer is entitled to all return premiums, dividends, discounts, or adjustments in connection with the insurances effected by the Employer.

1.4 The Contractor shall not include any premium charges for this insurance except to the extent, which he may deem necessary in his own interests to effect supplementary insurance to the insurance effected by the Employer. The Employer reserves the right to call for full information regarding insurance costs included by the Contractor.
In the event that the Contractor purchases any insurances in addition to those indicated above, the premium and taxes, duties, etc. shall be borne entirely by the contractor.

1.5 Any further clarification of the scope of cover provided by the Policies arranged by the Employer should be obtained from the Employer.

1.6 The Contractor and/or any other party who obtains indemnity under the policies effected under 1.1 shall become liable for the deductibles (first amount payable) which are applicable in respect of each and every occurrence or series of occurrences attributable to one source or cause giving rise to loss or damage or indemnifiable liability. The deductibles applicable to the policies effected under 1.1 are as follows:

a) Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability
Unless stated otherwise in the Policy Extensions the Deductibles shall be as follows which will apply in respect of each and every occurrence or series of occurrences arising out of or

in connection with any one event giving rise to loss or damage:

Section 1 Of The Policy – Contract Works
In respect of all loss or damage **R150,000** but increased to **R250,000** in respect of loss or damage arising out of or in connection with testing and commissioning.

Section 2 Of The Policy – Contractors Public Liability
R75,000 each and every claim in respect of Property Damage.

Section 3 Of The Policy – Removal Of Lateral Support Liability
R75,000 each and every claim.

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

c) Aviation Liability Insurance ;
In respect of each and every loss or damage or injury – **R300 000.**

d) Design & Construct Professional Indemnity Insurance
a) In respect of contracts under R50 million at award – **R5,000,000.**
b) **In respect of contracts over R50 million at award – R10,000,000**

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

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

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

Airports Company South Africa :
Nokulunga Masiza
Tel: +27 (0)11 723 1400
M: +27 (0)79 512 0532
Nokulunga.Masiza@airports.co.za
Buhle Mnguni
D: +27 (0)11 723 1400
M: +27 (0)74 535 9075
Buhle.Mnguni@airports.co.za

b) Preserve damage and make it available for inspection by a representative of the Insurers.

c) Wherever possible, photographs of damage should be taken.

d) Inform the police authorities promptly in the event of loss or damage by theft, burglary or any malicious persons(s) for the purpose of recovering any property so lost, discovering the guilty person or persons, and having him, her or them duly prosecuted.

e) Advise the Insurers of any other insurance(s) which may cover the same loss, damage or injury, or any part thereof.

f) Give to the Insurers every assistance to enable the Insurers to settle or resist any claim against the Insured, or institute any proceedings;

g) On completion the Claims Advice Form, the form must be sent to the Employers Insurance Brokers for further action (the original may be emailed to the Employers Insurance Broker). (Please do not remove the Claims Advice Form out of this document. Rather photocopy the form and send the copy to the Employers Insurance Brokers).

h) The Employer and the employers Insurance brokers / Insurers or their appointed loss adjusters shall have the right to make all and any enquiry's on the Site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall cooperate in carrying out such enquiry's.

i) The Contractor, Project Managers and Consultants must allow free access to Insurers' assessors for the purpose of investigating and assessing the loss or damage.

j) The Contractor must not proceed with the making good any off the loss without the prior authorisation of the Insurers.

k) The Contractor must keep separate records of the costs involved in making good any loss or damage and these records should be available at all times for inspection by Insurers. Such records should include inter alia the entire cost of labour, materials, transport and equipment.

l) Where required by the Employer, negotiate the settlement of claims with the Insurer or their appointed loss adjusters through the Employer's Insurance Brokers and shall obtain the Employer's approval of such settlement.

m) Once the amount of a claim is agreed by the Insurers and the Contractor, an "Agreement of Loss" form must be signed by the Contractor and if required this shall be counter signed by the Employer or the Project Managers.

n) The proceeds of such claim will, if required by the Employer, be paid net of any Deductible applicable under the policy by the Insurers to the Employer who on receipt thereof will arrange for payment to be made in terms of the Conditions of Contract. In the event that it is agreed by the Employer that such claims payment be made directly to the Contractor, the Contractor

shall arrange for the Employer to endorse the “Agreement of Loss” to this effect.

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

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

a) **Insurance of Construction Plant and Equipment** (including tools offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

b) **Contractor’s Common Law Liability/ Worker’s Compensation Insurance**
The Contractor shall take out and maintain employer's liability insurance with a limit of indemnity of not less than **R20,000,000** and/or workmen's compensation insurance covering personal injury to or death of the employees of the Contractor engaged in connection with the Works to the minimum value required by applicable law.
The Contractor shall procure that its Subcontractors take out and maintain similar insurance in respect of its Subcontractor’s personnel performing the Works.
In the event that a claim is made against the Employer in connection with such insurance, the Contractor shall indemnify and hold harmless the Employer against any such claim.
The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

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

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

e) Where the Contract involves manufacturing and/or fabrication of the Works or parts thereof

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

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

f) **Public Liability** insurances in excess of the Employers Public Liability insurances as stated under clause 1.1(a).

g) **Aviation Liability** insurances in excess of the Employers Aviation Liability insurances as stated under clause 1.1(c).

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

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

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

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

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

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

j) **Miscellaneous Insurance**

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

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

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

or his Sub-contractor will take to remedy such action.

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

2.4 **Sub-Contractors.**
The Contractor shall:
a) ensure that all potential and appointed Sub-contractors are aware of the whole contents of these Insurance Clauses, and

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

APPENDIX A
CONTRACTORS CLAIMS ADVICE FORM - FOR ACSA INSURED CONTRACTS UNDER THE ANNUAL POLICY
Send to : Airports Company South Africa

E-Mail The Following People :
Nokulunga.Masiza@airports.co.za
Buhle.Mnguni@airports.co.za
*.....
.....
.....
.....
.....
.....
***** (Please provide name of contracting company, site address, telephone numbers and e-mail address).
RE :ACSA CONTRACTORS : CAR/PL/PI : CLAIM

Date of loss : _____

Reported to site agent by : _____ Date : _____

Reported to Insurance Broker by : _____ Date : _____

Locality of Incident _____

How did the loss occur (cause) ? _____

Details and nature of loss or damage to Contract Works _____

Details of other property damaged _____

_____

Names and address of witnesses _____

Estimated cost of repairs (Separate records of all costs must be kept) R_____

Person whom assessor should contact _____

Telephone/Mobile Numbers Of Contact Person_____

Email Address of Contact Person_____

ANNEXURE 2: ACSA CAD STANDARD

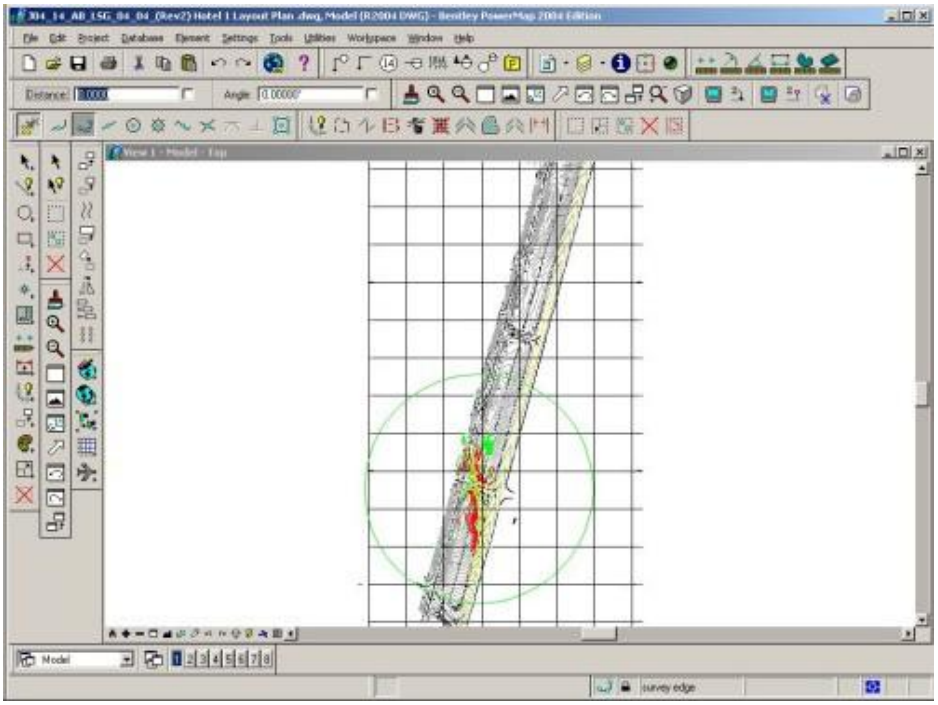
1. BACKGROUND

As part of its drive to be a world class airport authority the Airports Company of South Africa (ACSA) has developed and implemented an enterprise-wide Geographic Information System (GIS) as part of its numerous IT management systems.

The major source of spatial data for the ACSA GIS is the many Computer Aided Design (CAD) drawings produced for planning, design and construction purposes during the expansion and re-development of infrastructure on and around the airport by various consultants and contractors.

This CAD drafting specification is intended to simplify the CAD-to-GIS conversion process by specifying a number of good practices and protocols to be followed by consultants submitting CAD drawings to ACSA. These good practises and protocols are in line with industry and international best practice.

The specification is not intended to be inflexible and completely prescriptive, but rather to be a set of overall principles and guidelines that CAD personnel can apply to their production processes. These changes in methodology should generally be fairly minor and should be incorporated into the design and drafting process without much difficulty.



2. SUMMARY OF MAIN REQUIREMENTS

During setting up of CAD model for design		Detail
1	Draft CAD *models* in 'model space' or 'viewport view' and compile CAD final *drawing layouts* with frames in CAD 'paper space' or 'layout view'. No frames to be drawn in model space.	3.1
2	Draft CAD plan *models* in the correct geographically coordinated location. If this is not possible, as a minimum, *drawing layouts* should include a labelled coordinate grid or reference points to allow for geo-referencing.	3.2
3	Layer structure used must split features into logical and airport specific layers as recommended in this document. See full list in 3.2. In addition hatching, text and tables must be on different layers to the drawing elements.	3.3
4	All polygon features to be properly closed shapes and all line features to join at a point with no gap or overlaps. Hatched areas to include polygon boundary line.	3.4
5	If symbols are used to indicate point type features, e.g. valves, joints, poles etc. these must be on separate layers. If possible, a point must be placed on the corresponding main layer indicating the exact position or centre of these features.	3.5
6	Lines joining at these point type features must not stop at the start and end of symbols, but must continue to meet at the point in the centre of the feature. In addition, lines passing through multiple points should be separate line segments starting and ending at each point, irrespective if they are all in a continuous straight line.	3.5
7	All text to be on a single layer as far as possible. Any text associated with a feature to be placed as close to the feature as possible. E.g. stormwater pipe diameters as close as possible to the line representing the stormwater pipe – avoid using arrows or lead lines as much as possible	3.6
During compiling *drawing layouts* in 'paper space' / 'layout view'		Detail
8	All *drawing layouts* to be contained with a neat and appropriate drawing frame.	4.1
9	Frame to include an ACSA logo and the ACSA project name.	4.1
10	Frame to include a logical drawing number complete with a revision number.	4.1
11	Frame to include a date.	4.1
12	Frame to include full details of consultant – Logo, name, address, telephone number.	4.1
13	Frame to note details of applicable coordinate system and other survey info.	4.1
14	Frame to indicate status of drawing e.g. For information, For tender purposes, For construction, As-Built.	4.1
15	Frame to include the name of the CAD drawing that contains the model	4.1
Submission to ACSA		Detail
16	Drawings to be submitted to ACSA at the end of each stage of design and construction cycle E.g. Planning and architectural design complete, engineering design complete, construction complete with as-built corrections.	5.1
17	Submission must be made per project on a single or set of CDs or DVDs.	5.1
18	PDF 'electronic hard copy' of every drawing to be submitted. Size of PDF not to exceed 500kB. Filename of 'electronic hard copy to be the Consultants drawing number plus the revision number. Egg. P0921-ACSA-PIER-001_REV0.pdf	5.2
19	ACSA Drawing Submission Form to be completed and submitted with drawings. See 5.2 for pro-forma. To be submitted as Microsoft Excel as far as possible.	5.3
20	CDs/DVDs labels to include airport name, project name, project stage, consultant name, submission date, total number of disks in set and number of each disk within set as a minimum. Labels to appear directly on the media and not on the media cover.	5.4
21	CAD drawings to be submitted in an approved CAD file format. Approved formats include .dxf, .dwg, .dgn. CAD drawings to be submitted without reference files. Reference files to be merged into the master drawing and clipped as required.	5.5

3. DETAIL – SETTING UP OF THE CAD MODEL

3.1. Models and drawing layouts

Most modern CAD packages employ the concept of *'model space'* in which a CAD model is set up and *'paper or layout space'* in which views of this model are extracted, framed and set up as individual drawings. The drawing below illustrates this. Setting up drawings in this matter is efficient as many drawings can be contained with a single CAD file.

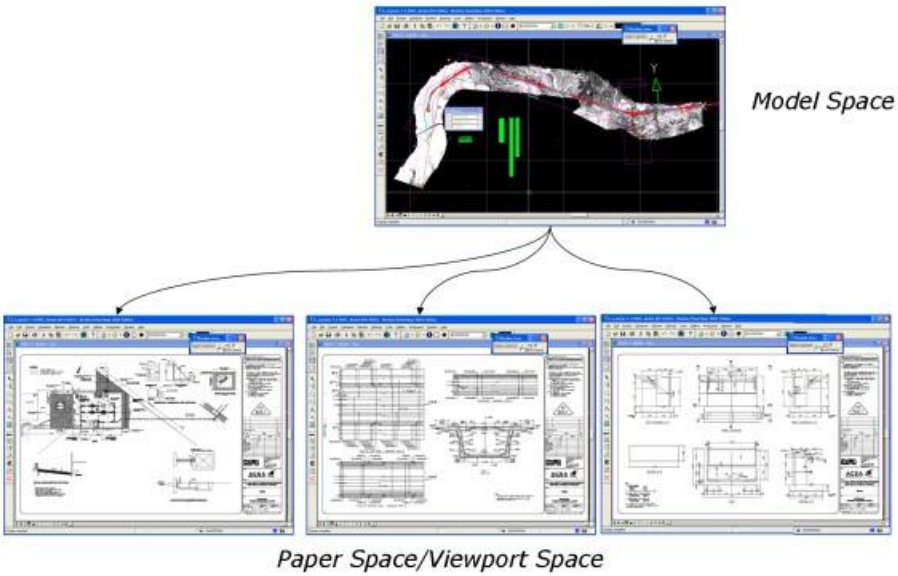


Figure 1 – Layout showing model and paper/viewport space

NOTE: - If CAD detailing is done directly in paper/viewport space, the data is often not visible to GIS software, which vastly complicates the inclusion of data into the ACSA GIS. It is therefore imperative that CAD models or designs are detailed in model space as per the recommendation above.

The terminology above differs from one CAD package to another and the manner in which they operate may differ somewhat, but the general concepts remain the same. The notes below refer to the two main CAD packages used in South Africa.

AutoCAD DWG - Is made up of two parts: Model space and Paper space. The Model space is where you draw your design. The paper space is where you reference in your drawing border and create what are called "view ports". A view port punches a hole in the paper space, to look through to the design in the model space. Each viewport you create can zoom into a part, or whole, of the design at different scales. A DWG can only have one model space but can have multiple Paper spaces.

Microstation (DGN) - May consist of multiple spaces or "models" as Bentley terms them. A DGN consists of at least one model – the Default Model. The file may contain any number of additional models, but unlike AutoCAD these do not only have to be Paperspace, they may be either Design Models or Sheet Models. Draw your design in the Model Space. The Sheet Model is where you reference in your drawing border and self reference in the model, to create your layout or plot. A DGN can have multiple models and multiple Sheets.

3.2. Models in correct geographic space / coordinate grid

It is a requirement that all CAD drawings in plan are detailed in the correct geographic space such that a coordinate point on the drawing must correspond to its actual coordinate point on the ground. It is common for coordinates on older drawings to be adjusted by having a constant value subtracted from the actual coordinate. Modern CAD packages can handle the larger values of the actual coordinates and thus the practise of removing the constant should be discouraged.

In addition, it is vital that all drawings set up in *paper or viewport space* note the applicable coordinate reference systems, datums and other relevant survey information.

If, for some reason, the drawing cannot be drawn in the correct geographic space, as a bare minimum, a labelled coordinate grid should be provided over each drawing to allow the drawing to be geo-referenced into the correct position.

Even if the drawing is in the correct geographic space it is good practise to include this grid. The figure below illustrates this.

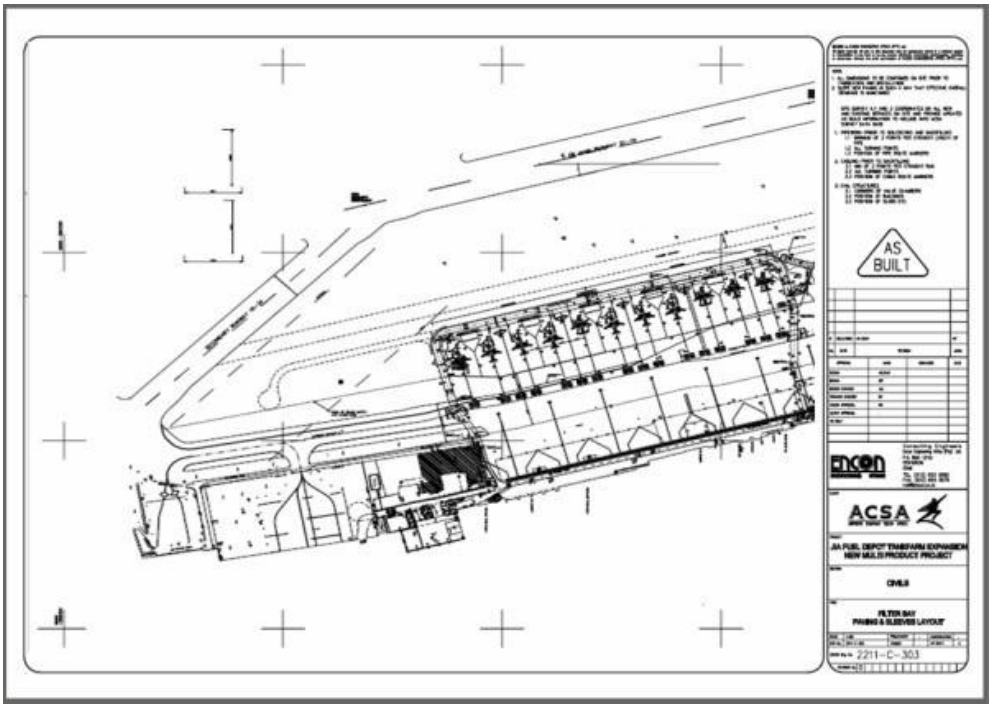


Figure 2 – Drawing showing coordinate grid

3.3. Logical layer structure

The layer list below is the required breakdown of layers to be used for CAD detailing by consultants working on ACSA projects. The list is mainly relevant to plan drawings, as these will largely contain information that will be added to the ACSA GIS. Adopting these layers during CAD detailing will assist ACSA in populating their GIS with this information as efficiently as possible.

The list is not exhaustive and must be added to as required to accommodate any content on the drawing that is not included in the list.

Layers used must be logical and must contain only single type of feature or a set of features that can be logically grouped. *E.g. All stormwater pipes and culverts must be on a single layer; electrical cables must be on a separate layer etc.*

Hatching, text and tables must be included on separate layers. There are two suggested ways in doing this.

- Placing hatching, text and tables pertaining to a specific drawing layer on their own individual layers. *E.g. Drawing layer=Airside_surfaces; Hatching layer=Airside_surfaces_hatch; Text layer=Airside_surfaces_text etc.*
- Placing all hatching, text and tables each on a single layer *E.g. Hatching layer= Hatch_All, Text layer=Text_All etc.*

Table 1 - ACSA Layer List for Plan Drawings

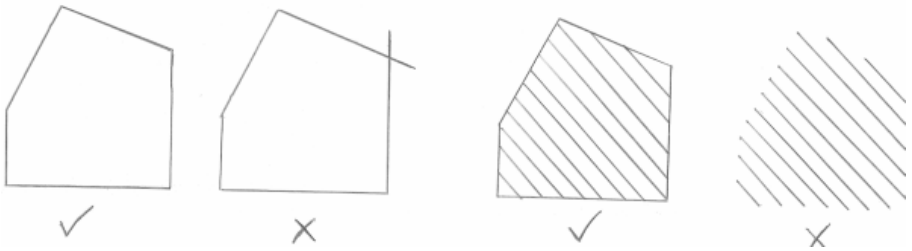
Access_points	Lighting
Airside_surfaces	Networkcomcables
Airside_surface_markings	Noise_contours
Buildings	Obstacle_surfaces
Cadastral	Obstacles
Control_cables	Parking
Conveyors	Retaining_walls
Ducts	Roads_bridges
Electrical_cables	Road_markings
Electrical_substations	Security_cables
Fences_Walls	Servitudes
Flood_lines	Sewer_pipes
Floor_plans	Sewer_tanks
Fuel_lines	Signs
Fuel_tanks	Survey_control_points
Landuse	Stormwater_pipes_culverts
Landside_surfaces	Water_main_pipes
Lifts	Water_tanks

3.4. Clean polygon and line features

Area or polygon features such as erven boundaries; building footprints etc. must be clean polygons and must be properly closed off.

If hatching is to be used to demarcate an area this should include a polygon feature enclosing the hatching and should not only be the hatching itself.

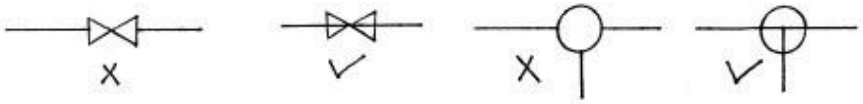
Examples of these are shown in the sketches below.



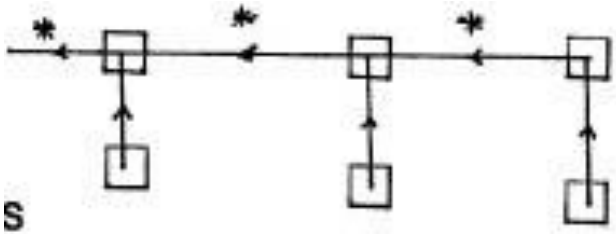
3.5. Points, point symbols and lines at point symbols

CAD operators and designers can continue using their own standard symbols for features such as poles, manholes, signs etc, as these are not imported into the GIS. However, it is beneficial if a point is placed at the centre or origin of the symbol. This point is imported into the GIS and used as the origin for a symbol placed by the GIS. If a feature falls on a line e.g. a manhole on a pipe, a valve on a pipe, a pole on a cable etc, it is important that the point lies exactly on the line as shown in the figure below.

As far as possible, single lines should be used to denote linear features such as pipes, kerb lines etc. Lines should be continuous i.e. they should meet at the centre of a manhole and not stop at the perimeter as illustrated below.



Where possible, separate lines shall be drawn between features such as valves, tees, crosses, manholes etc even if these features are on a straight line. This is illustrated below.



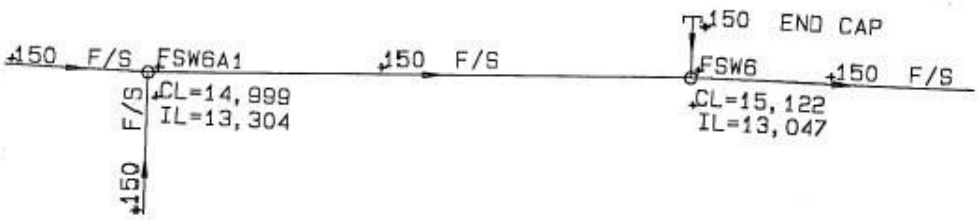
3.6. Text on layers and text in tables

Typically text information extends to items such as manhole numbers; manhole levels; valve types; pipe diameters; cable types; road centreline levels, finishing details etc.

Any text placed on a CAD drawing should be placed as close as possible to the object to which it refers. The practise of placing text at some distance from the object and using arrows to indicate the object should be avoided as far as possible. This practise will assist the GIS conversion processes by easing the population of the GIS attribute database with the text on the CAD drawing.

Should text consist of more than one line, it should be input as a single text entity with line breaks rather than multiple text entries and thus should only have single placement point.

The figure below illustrates good practise when placing layers on a water main CAD drawing.



If tables are used to place text on a drawing these must be well referenced to the features to which they refer.

4. DETAIL – SETTING UP OF DRAWINGS

4.1. Example of a compliant drawing and drawing frame

The figures below show the correct way to set up a drawing and shows the minimum details that should be included.

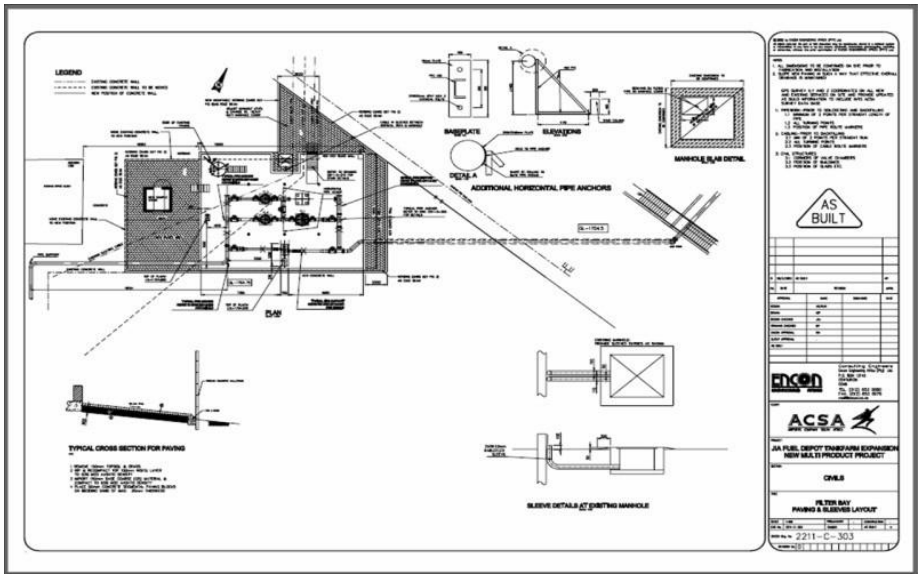


Figure 3 – Drawing correctly set up with frame and details

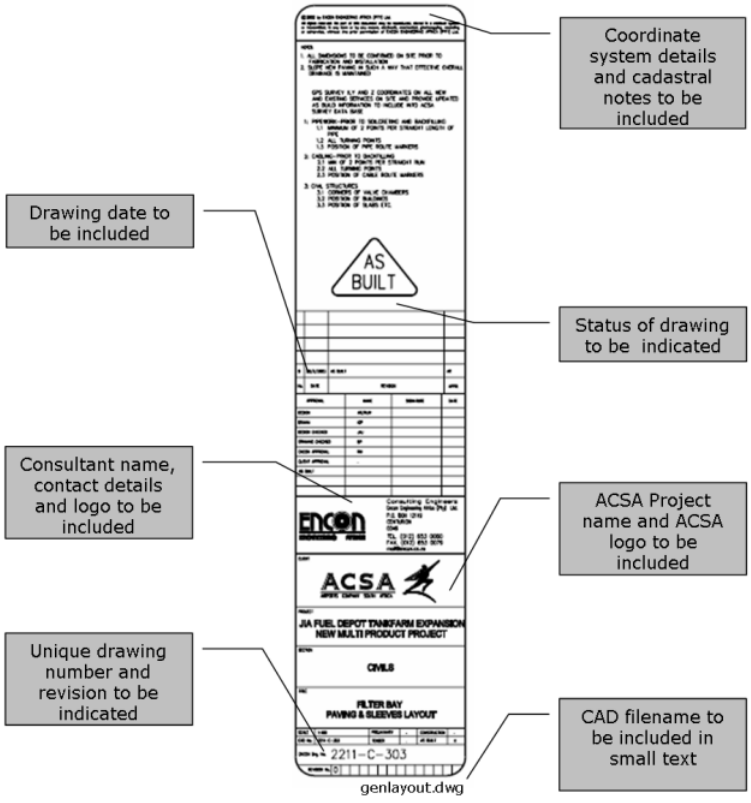
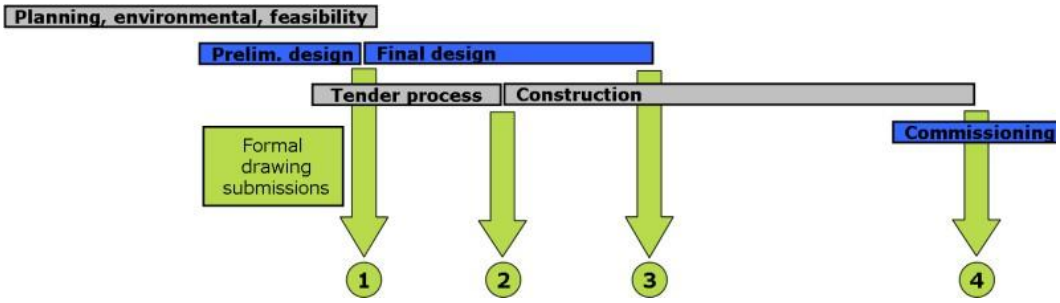


Figure 4 – Minimum requirement for details on drawing frame

5. DETAIL – SUBMISSION TO ACSA

5.1. Design cycle and submission of drawings

It is essential that CAD drawings be submitted to ACSA correctly and formally. These submissions must be done at logical points in the development of an ACSA project and must be submitted in logical batches, identified by the ACSA project name. The project process below illustrates typical drawing submission point, but this may vary due to the nature of different projects.



1. Final planning, feasibility and preliminary design drawings to be submitted.

2. Set of tender drawings to be submitted.

3. Final design drawings to be submitted. Can be submitted in logical batches per phase of the project completed. Revisions of design drawings to be submitted during the course of design and construction period to be submitted as required.

4. Final 'As built' drawings to be submitted. *These are the most valuable submission to ACSA and all projects must be concluded with a formal submission of these 'As built' drawings.*

Any drawings sent to ACSA staff informally during the course of a project, usually by email and with special relevance to preliminary drawings used for discussion shall not be considered as a formal submission. Final versions of these drawings must be included in one of the above formal project CAD drawing submissions to ACSA.

All formal submissions must be made per project on a single set of CD's or DVD. See 5.4 for example CD/DVD Label.

5.2. PDF 'electronic hard copy'

Each submission must include a PDF 'electronic hard copy' of each drawing set up in paper or viewport space.

Naming of the PDF 'electronic hard copies' shall be the drawing no and the revision number. *E.g. C0920-ACSA-NORTH PIER-001_REV0.pdf*

The 'electronic hard copies' must be printed as close to full size as possible, but with to a minimum paper size of A3. At the same time file sizes of the PDFs are not to exceed 500kB as far as possible. PDF printer resolutions must be set to ensure that this file size is not exceeded.

Most modern CAD packages have built in PDF printers but should this not be the case these can be obtained freely off the internet at the following sources.

Adobe Acrobat PDF Printer – www.adobe.com Cute PDF Printer – www.cutepdf.com

5.3. Submission form

A submission form must accompany any batch of drawings submitted to ACSA. A pro-forma of the submission form is show below. The standard for the submission for is in Microsoft Excel if at all possible.

ACSA CAD DRAWING SUBMISSION FORM		
AIRPORT:- PROJECT NAME:- SUBMITTED BY:- CONTACT NO:- CONTACT NAME:- SUBMISSION STATUS:	OR Tambo International Airport Echo Apron Extension ENCON Engineers 011 – 555 5555 Joe Soap Final Design	
PDF Filename	CAD file name	Drawing Title
C0920-NORTH PIER-001_REV0.pdf	genlayout.dwg	Northern elevation of pier
C0920-NORTH PIER-002_REV0.pdf	genlayout.dwg	Drainage details on second floor
C0920-NORTH PIER-003_REV0.pdf	genlayout.dwg	Reinforcing of roof
C0920-NORTH PIER-004_REV0.pdf	genlayout.dwg	Layout of air-bridges
C0920-NORTH PIER-005_REV0.pdf	mainmodel.dwg	Window and door schedule
C0920-NORTH PIER-006_REV0.pdf	mainmodel.dwg	Eastern layout
C0920-NORTH PIER-007_REV0.pdf	mainmodel.dwg	Western layout
Etc.		

5.4. CD/DVD Submission labelling

The mock-up below shows the minimum labelling on CDs/DVDs submitted to ACSA.

5.5. CAD drawing formats and reference files

All CAD drawings submitted must be in an approved CAD format. This extends to the following formats:

- AutoCAD – DWG extension
- Bentley Microstation – DGN extension
- Drawing Exchange format – DXF extension

CAD drawings that make use of reference files referenced into the CAD model from different files (E.g. Contour lines may be referenced into a road design drawing from different survey model contained a different file.) must be merged into the model before submission. *Final CAD files submitted must be self contained and should not contain references to any file of any type.*

If the aforementioned reference files are large (E.g. the abovementioned contour lines may extend over an entire metropole or province), these must be clipped to the extent required for the drawing in question, in order to reduce the file size of the file to be submitted