

ADDENDA ISSUED TO TENDERERS ADDENDUM No. 01

BID DOCUMENT

FOR

CONTRACTOR APPOINTMENT FOR REHABILITATION OF RUNWAY 01/19 AND APRON TAXILANE AT CAPE TOWN INTERNATIONAL AIRPORT FOR A PERIOD OF 36 MONTHS

Bid Reference Number: CTIA7333/2023/RFP

This Addendum forms an integral part of the Contract and is to be bound in the correct place and relevant Volumes of the Contract Documents, and returned with any tender submitted. Receipt hereof by the Tenderer is to be recorded on <u>Form A2: Record of Addenda to Tender Documents</u> bound in Volume 3: Bid Document.

The following detailed instructions for amendment of the Documents are forwarded for your information and necessary action please :

[VOLUME 3: The Contract - Appendix 1]

C1. AGREEMENT AND CONTRACT DATA
C1.2 Contract Data
CONTRACT SPECIFIC DATA
(a) Part 1: Contract Data provided by the Employer

AD 1.1 Clause Number 5.1.1: Time calculation

Amend the clause to read as follows:

"No extension of time to the Mobilization Period shall be considered for any delays attributable to the Contractor due to the Contractor not timeously completing all of the stipulated requirements prior to the Commencement of the Works."

AD 1.2 Clause Number 5.2: Commencement of the Contract

Add the following:

"Should any delays occur during the construction period which extends the project beyond the construction window the works will be stopped, the Contractor be instructed to de-establish from site and be instructed to re-stablish on site during the next construction window. Contract Price Adjustments will be applicable as per the Contract (See Clause 6.8.2)."

VERSION: D15/2015/R2

AD 1.3 Clause Number 5.4.3: Delay in giving possession

Amend the clause to read as follows:

"No extension of time to the Mobilization Period shall be considered for any delays attributable to the Contractor due to the Contractor not timeously completing all of the stipulated requirements prior to the Commencement of the Works."

AD 1.4 Clause Number 5.12: Extension of time to Practical Completion

Amend the clause to read as follows:

"No extension of time to the Mobilization Period shall be considered for any delays attributable to the Contractor due to the Contractor not timeously completing all of the stipulated requirements prior to the Commencement of the Works."

AD 1.5 Clause Number 10.1: Contractor's claim

Amend the clause to read as follows:

"No extension of time to the Mobilization Period shall be considered for any delays attributable to the Contractor due to the Contractor not timeously completing all of the stipulated requirements prior to the Commencement of the Works."

C2. PRICING DATA
C2.2 Bill of Quantities
SCHEDULE A: GENERAL
Section B1200 GENERAL REQUIREMENTS AND PROVISIONS

AD 1.6 Replace Item B12.13 with the following payment items:

	ENERAL REQUIREMENTS AND PROVISIONS				
B12.13 Er					
Pe	nablement of Gate 6 during the Mobilization eriod				
(a)	a) Provisional Sum for the works required for the				
en	nablement of Gate 6 as described in the payment				
cla	ause	Prov Sum	1	R2 000 000.00	R2 000 000.00
(b	o) Contractor's charges in respect of subitem				
B1	12.13(a)	%	R2 000 000.00		

AD1.7 Add the following new payment item:

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
B1200	GENERAL REQUIREMENTS AND PROVISIONS				
B12.14	Payment of ACSA approved escorts employed by the Contractor and seconded to the Employer (a) Appointment and payment of ACSA approved escorts (b) Contractor's charges in respect of subitem	Prov Sum	1	R4 000 000.00	R4 000 000.00
	B12.14(a)	%	R4 000 000.00		

Replace Section B1200 with the updated schedule under AD01 Annexure B.

Section B1500 CCOMMODATION OF TRAFFIC

AD 1.8 Replace Item B15.17 with the following payment items:

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
B1500	ACCOMMODATION OF TRAFFIC				
B15.17	Penalty to be deducted for non-compliance with requirements:				
	(a) Accommodation of traffic as set out in B1230 and B1500				
	(i) Fixed penalty per occurrence	No		-R50 000.00	rate only
	(ii) Time related penalty	hours		-R50 000.00	rate only
	(b) Failing to meet runway or taxiway opening				
	requirements: (i) Fixed penalty per occurrence	No		-R200 000.00	rate only
	(ii) Time related penalty	min		-R25 000.00	rate only

Replace Section B1500 with the updated schedule under AD01_Annexure C.

C3. SCOPE OF WORK
C3.3 PROCUREMENT
C3.3.2 SUBCONTRACTING

AD1.9: Replace the 1st paragraph with the following:

"The Employer shall stipulate in the tender data that the Contractor shall provide a minimum Contract Participation Goal (CPG) of **50%** of the total project value and develop targeted enterprises in the two agreed developmental areas."

C3. SCOPE OF WORK C3.4 CONSTRUCTION

PART B: PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS

B1204: PROGRAMME OF WORK

AD1.10: Under the bulleted items included after the 3rd paragraph add the following activity to be included in the programme during the Mobilization Period:

o "The enablement of Gate 6 as specified."

B1232: CONTRACTOR'S ESCORTS

AD1.11: Replace the 1st paragraph with the following:

"The Contractor shall nominate two suitable staff members (additional to the Traffic Safety Officer), to be approved by ACSA, to undergo the required ACSA training to take on the duties and responsibilities of escorts. The following conditions will apply:"

B1233: MEASUREMENT AND PAYMENT

AD1.12: Under the payment description of payment items B12.13 delete the following:

"ACSA Maintenance – Installation of a 450m HDPE 32mm Class 12.5 PE 100 (SANS 4427) water line with HDPE Class 16 fittings and connections"

And replace with the following:

"The Contractor shall install a 450m HDPE 32mm Class 12.5 PE 100 (SANS 4427) water line with HDPE Class 16 fittings and connections"

AD1.13: Add the following new payment item:

"Item Unit

B12.14 Payment of ACSA approved escorts employed by the Contractor and seconded to the Employer

- (a) Appointment and payment of ACSA approved escorts...... Provisional Sum
- (b) Contractor's charges in respect of sub item B12.14(a)...... Percentage (%)

The Contractor shall appoint, facilitate permitting and monthly salary payment of the ACSA approved escorts, which will be seconded to the Employer, for the duration of their appointment at the rate approved by the Employer under subitem (a). The escorts will work independently from the Contractor and will report directly to the Employer.

Additional payments to be facilitated by the Contractor under subitem (a) shall include the leasing of ACSA approved vehicles for the escorts.

The charge or mark-up tendered under subitem (b) or allowed for is a percentage of the amount actually paid under the provisional sum item. The percentage shall cover all the Contractors' sourcing, handling, profit, and payment in terms of the escorts (and their vehicles). The Contractor shall forfeit his mark-up when the escorts is not paid in time."

C3. SCOPE OF WORK C3.5 ACSA SPECIFICATIONS

C3.5.1 OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

AD1.14: Replace "ANNEXURE A BASELINE RISK ASSESSMENT & ISSUE REGISTER" on Page 3.5-32 with the "ANNEXURE A BASELINE RISK ASSESSMENT & ISSUE REGISTER" included herein under **AD01_Annexure D**.

CLARIFICATIONS TO QUESTIONS FROM TENDERERS

Only questions submitted in writing will be formally answered and become part of the Tender Documents. The questions received in writing from tenderers up to **11 April 2024**, as well as the answers to the questions, are listed in the table below.

1.	Q : Book 1: Form C11. Para 3- Indicates a 50% CPG goal. How does this relate to the 30% subcontract goal?
	A : The requirement is that 50% of the contract value must be expended in accordance with the requirements as stated under Item 3.
	Additional requirements are stipulated under Item 4 for the 30% subcontracting portion which monetary value forms part of the 50% CPG target.
2.	Q: Book 1: Form C11. Para 3.1-3.5 – how are these targets relevant?
	A: As stated under Item 1 above. The Contractor must achieve the specified targets.
3.	Q : Book 1: Form C12 – how do these targets apply on a 6-month contract?

A: The Contractor must consider the four methods available to him to achieve the 0.25% Construction Skills Development Goal during the 6-month construction period. The 0.25% portion of the budget has been included on the summary page of the Bill of Quantities.

4. **Q**: Book 2: Cl 5.1.1 Extension of time or standing time claims shall be considered for the period prior to the instruction to Commencement of the Works. The Construction Period will only commence on the instruction to Commence with the Works has been issued. Please clarify EOT in (a) mobilization period and (b) construction period.

A: Addressed in Addendum 01 - AD1.1

5. **Q**: Book 2: CI 5.2 Should a delay of any nature result in delaying the mobilization period the available construction window might be lost and the Employer my instruct the deferment of the works by a period to be determined by the Employer and/or the Agents. Contract Price Adjustments will be applicable as per the Contract (See Clause 6.8.2). Refers only to delays in mobilization period. What about construction period?

A: It was noted during the Briefing Meeting that should any delays occur during the construction period which extends the project beyond the construction window the works will be stopped, the Contractor de-establish and re-stablish during the next construction window, and that Contract Price Adjustments will be applicable as per the Contract. **Clause 5.2 has been updated with Addendum 01 – AD1.2**

6. **Q**: Book 2: 5.3.1 (x) Submission of proposed Electrical Engineer to be appointed by the Contractor. Commencement of the Works shall only be instructed once:

Upon the Electrical Engineer's validation of the electrical specifications and products, the Employer's approval of the Change Request for the electrical works and the delivery on site of the electrical products. Please clarify what is required for "Employer's approval"?

A: The Electrical Engineer is required to submit his proposed runway and taxilane lighting options, based on the latest available products and technology, to ACSA Chief Electrical Engineer for consideration and approval. Once approved the Contractor can initiate the procurement phase.

The Electrical Engineer must inspect and assess the current electrical infrastructure supplying electricity to the runway and taxilane lighting within the immediate vicinity of the contract limit. Considering the planned construction works and his condition assessment of the electrical infrastructure he will advise ACSA Chief Engineer of any works required. Once approved he must quantify and cost the works, and compile detailed project specific specifications for approval by ACSA Chief Electrical Engineer.

7. **Q**: Book 2: 5.4.3 Extension of time or standing time claims shall be considered for the period prior to the instruction to Commencement of the Works. The Construction Period will only commence on the instruction to Commence with the Works has been issued. Please clarify EOT in (a) mobilization period and (b) construction period.

A: Addressed in Addendum 01 - AD1.3

8. **Q**: Book 2: 5.8.1 Saturday 0:00-05:00?

A: The allowable working shifts are as follows:

Monday morning 00h00 – 05h00
 Tuesday morning 00h00 – 05h00
 Wednesday morning 00h00 – 05h00

	• Thursday morning 00h00 – 05h00
	 Friday morning Saturday morning 00h00 – 05h00 (if required)
	•
9.	Q : Book 2: 5.12 Extension of time or standing time claims shall be considered for the period prior to the instruction to Commencement of the Works. The Construction Period will only commence on the instruction to Commence with the Works has been issued. Please clarify EOT in (a) mobilization period and (b) construction period.
	A: Addressed in Addendum 01 – AD1.4
10.	Q : Book 2: 10.1 Extension of time or standing time claims shall be considered for the period prior to the instruction to Commencement of the Works. The Construction Period will only commence on the instruction to Commence with the Works has been issued. Please clarify EOT in (a) mobilization period and (b) construction period.
	A: Addressed in Addendum 01 – AD1.5
11.	Q : Book 2: B15.17 –BOQ differs from Project Spec - R250,000 per occurrence? R50,000 per minute?
	A: Addressed in Addendum 01 – AD1.8
12.	Q : Scope of Work - C.3.1.3 All items appear to be "after the completion of the asphalt layer works" – which is not possible. Please clarify.
	A: The raised question is unclear.
13.	Q : Scope of Work - Section B4200 Asphalt designs phase to be concluded during the two-month Mobilization Period. No allowances for approval. Level II takes 12 weeks.
	A : The tight timelines are known to the Bidder and pre-discussion should be initiated with their preferred asphalt supplier during the tendering phase.
14.	Q: Scope of Work - B1204 All to occur during the mobilization period:
	Appointment of the Electrical Engineer Electrical Engineer's validation of the scope of work, specifications and products Application and approval by the Employer of the Change Request for the confirmed electrical works; and Procurement of the electrical products as instructed by the Electrical Engineer and approved by ACSA.
	In our view this will take longer than 2 months.
	A : The tight timelines are known to the Bidder and pre-discussion should be initiated with their Electrical Engineer to plan according.

Kindly acknowledge receipt of this Addendum by email using the accompanying Acknowledgement Form (Annexure A).

Yours faithfully,

Maliga Gounden (ACSA SCM Representative) tenders.scm1@airports.co.za

Enclosed with this addendum:

AD01_Annexure A Acknowledgement Form

AD01_Annexure B Bill of Quantities Section B1200
AD01_Annexure C Bill of Quantities Section B1500

AD01_Annexure D ANNEXURE A BASELINE RISK ASSESSMENT & ISSUE REGISTER

AD01_Annexure A

Acknowledgement Form

ADDENDA ISSUED TO TENDERERS: AD	DENDUM No. 01
BID DOCUMENT	
FOR	
	REHABILITATION OF RUNWAY 01/19 AND IERNATIONAL AIRPORT FOR A PERIOD OF 36
Bid Reference Number: CTIA7333/20	023/RFP
We acknowledge receipt of the above co of the instructions detailed in the Notice.	onfirm that any tender we submit will take account
Date:	Signed:
	On behalf of:

Maliga Gounden (ACSA SCM Representative)

tenders.scm1@airports.co.za

To:

Email:

AD01_Annexure B

Bill of Quantities Section B1200

REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN **INTERNATIONAL AIRPORT**

SCHEDULE A: GENERAL

ITEM	DESCRIPTION	UNIT	QTY	RATE	SECTION B1200 AMOUNT R
B1200	GENERAL REQUIREMENTS AND PROVISIONS	-			
		l .			
B12.01	Standing time	hr	18		
B12.02	Control of dust and pollution	L/Sum	1		
B12.03	Safety induction course, AVOB, PARTEC and permits	L/Sum	1		
B12.04	Traffic Safety Officer	L/Sum	1		
B12.05	Escort services for all project vehicles	Person. months	12		
B12.06	Emergency Removal Equipment	L/Sum	1		
B12.07	Supply of radios	Prov Sum	1		
B12.08	Detection of Services	Prov Sum	1		
B12.09	Topographical survey requested by Engineer	Prov Sum	1		
B12.12	Provisional Sum for the Employer's approved security services at Gate 6: (a) Direct payment by Contractor to the approved Security Service Provider for Security Supervisors (b) Contractor's charges in respect of subitem B12.12(a) (c) Direct payment by Contractor to the approved Security Service Provider for Security Guards (d) Contractor's charges in respect of subitem	Prov Sum % Prov Sum	1 R750 000.00	R750 000.00 R2 500 000.00	R750 000.00 R2 500 000.00
	B12.12(c)	%	R2 500 000.00		
B12.13	Enablement of Gate 6 during the Mobilization Period (a) Provisional Sum for the works required for the enablement of Gate 6 as described in the payment clause (b) Contractor's charges in respect of subitem B12.13(a) Payment of ACSA approved escorts employed by	Prov Sum %	1 R2 000 000.00	R2 000 000.00	R2 000 000.00
	the Contractor and seconded to the Employer (a) Appointment and payment of ACSA approved escorts (b) Contractor's charges in respect of subitem B12.14(a)	Prov Sum %	1 R4 000 000.00	R4 000 000.00	R4 000 000.00

AD01_Annexure C

Bill of Quantities Section B1500

REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

SCHEDULE B: CIVIL WORKS RUNWAY 01/19

SECTION B1500

ITEM	DESCRIPTION	UNIT	QTY	RATE	SECTION B1500 AMOUNT R
B1500	ACCOMMODATION OF TRAFFIC				
B15.03	Temporary traffic-control facilities				
	(a) Flagmen	man-day	300		
	(d) Amber flicker lights	No	14		
	(h) Delineators (TW401 & TN402)				
	(250 mm x 1 000 mm)				
	(i) Mounted back to back	No	200		
	(j) Traffic cones (750 mm)	No	20		
	u, rrame comes (roo mm)				
15.04	Relocation of traffic-control facilities	Lump Sum	1		
B15.14	Safety Barriers:				
	(a) Manufacturing and supply of aircraft barriers as				
	per Drawing No. 14029-010	No	5		
	(b) Moveable barricade (red and white alternating)				
	HDPE plastic barrier as per drawing 14029-010				
	, and the second	No.	20		
	(c) Placing, repositioning and final removal of				
	vehicle and aircraft barriers upon completion of				
	shifts	L/Sum	1		
	(d) Runway Closure Marker as per Drawing No.	L/Juiii	-		
	14029-010	No.	2		
	14025-010	140.	2		
B15.15	Provision of lighting on site to work areas	L/Sum	1		
B15.16	Provision of lighting on site to work areas as				
	requested by the Engineer	hours	600		
	requestion by the angleses				
B15.17	Penalty to be deducted for non-compliance with				
	requirements:				
	(a) Accommodation of traffic as set out in B1230				
	and B1500				
	(i) Fixed penalty per occurrence	No		-R50 000.00	rate only
	(ii) Time related penalty	hours		-R50 000.00	rate only
		Hours		-11.50 000.00	rate only
	(b) Failing to meet runway or taxiway opening				
	requirements:	N.		D200 000 00	
	(i) Fixed penalty per occurrence	No		-R200 000.00	rate only
	(ii) Time related penalty	min		-R25 000.00	rate only
1					
1					
1					
1					
1					
1					
TOTAL CARRII	ED FORWARD TO SUMMARY	•			

AD01_Annexure D

ANNEXURE A BASELINE RISK ASSESSMENT & ISSUE REGISTER

REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

ANNEXURE A

BASELINE RISK ASSESSMENT & ISSUE REGISTER

PROJECT HEALTH AND SAFETY SPECIFICATION

In terms of Construction Regulations 2014

C4. PROJECT CLIENT

AIRPORTS COMPANY SOUTH AFRICA (ACSA)

Description of Project Works

4580-4849 REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

Project Location

CAPE TOWN INTERNATIONAL AIRPORT

Date

OCTOBER 2023

Project Health and Safety Specification developed by:

Mark Winter ROSPROF (SA), CMIOSH (UK)

Cell: 071 603 2213 Tel: 021 712 1643

Email: markw@safepractice.co.za

PROJECT HEALTH AND SAFETY SPECIFICATION

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REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

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REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

Annexure A Requirements for the Safety Plan Assessment

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Annexure D Safety Specification and Baseline Risk Assessment Issue Register

2.0 SPECIFIC PROJECT INFORMATION

1. 1 INTRODUCTION AND DEFINITIONS

PLEASE NOTE THAT THE REQUIREMENTS OF THE NEW CONSTRUCTION REGULATIONS 2014 HAVE BEEN IN EFFECT FROM 7^{TH} AUGUST 2014. THE NEW REGULATIONS PLACE ADDITIONAL LEGAL DUTIES UPON PRINCIPAL CONTRACTORS AND CONTRACTORS. ALTHOUGH THIS HEALTH AND SAFETY SPECIFICATION INCLUDES MUCH OF THE CONTENT OF THESE NEW REQUIREMENTS, THE CONTRACTOR WILL BE DEEMED TO BE FAMILIAR WITH THE REQUIREMENTS OF THESE REGULATIONS, AND TO HAVE FACTORED IN ALL THE DUTIES PLACED UPON CONTRACTORS AND PRINCIPAL CONTRACTORS IN THE TENDER. A COPY OF THE REGULATIONS CAN BE VIEWED ON THE DEPARTMENT OF LABOUR'S WEBSITE.

This Health and Safety Specification contains clauses that are generally applicable to construction activities, as well as imposing pro-active controls associated with activities that impact on Health and Safety as it relates to plant and machinery. Compliance to the requirements of the Occupational Health and Safety Act 1993 is in addition to the requirements of this Health and Safety Specification and is part of the Contractor's responsibility. The Client will monitor that the Contractors comply with the requirements of such legislation.

ALL REFERENCES TO CLIENT IN THIS HEALTH AND SAFETY SPECIFICATION ALSO REFER TO CLIENT AGENT, WHERE SO APPOINTED.

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

Definitions (as per the Construction Regulations 2014) applicable to this Health and Safety Specification:

"agent" means a competent person who acts as a representative for a client;

"angle of repose" means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on the surface, rather than sliding or crumbling away;

"bulk mixing plant" means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work;

"client" means any person for whom construction work is being performed;

"competent person" means a person who 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 is familiar with the Act and with the applicable regulations made under the Act;

"construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

"construction site" means a work place where construction work is being performed;

REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

"construction supervisor" means a competent person responsible for supervising construction activities on a construction site;

"construction vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing 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;

"construction work permit" means a document issued in terms of regulation 3;

"contractor" means an employer who performs construction work;

"demolition work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

"design" in relation to any structure, includes drawings, calculations, design details and specifications;

"designer" means a competent person who-

- prepares a design;
- checks and approves a design;
- arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
- designs temporary work, including its components;
- an architect or engineer contributing to, or having overall responsibility for a design;
- a building services engineer designing details for fixed plant;
- a surveyor specifying articles or drawing up specifications;
- a contractor carrying out design work as part of a design and building project; or
- an interior designer, shop-fitter or landscape architect;

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

"explosive actuated fastening device" means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing;

"fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration devices, lifelines or similar equipment;

"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 guard-rails, screens, barricades, anchorages or similar equipment;

"fall protection plan" means a documented plan, which includes and provides for -

- all risks relating to working from a fall risk position, considering the nature of work undertaken;
- the procedures and methods to be applied in order to eliminate the risk of falling; and
- a rescue plan and procedures;

"fall risk" means any potential exposure to falling either from, off or into;

REHABILITATION OF RUNWAY 01/19 AND REHABILITATION OF THE AIRSIDE APRON TAXI LANE AT CAPE TOWN INTERNATIONAL AIRPORT

"health and safety file " means a file, or other record containing the information in writing required by these Regulations;

"health and safety plan" means a site, activity or project specific documented plan in accordance with the dient's health and safety specification;

"health and safety specification" means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work;

"material hoist" means a hoist used to lower or raise material and equipment, excluding passengers;

"medical certificate of fitness" means a certificate contemplated in regulation 7(8);

"mobile plant" means any machinery, appliance or other similar device that is able to move independently, and is used for the purpose of performing construction work on a construction site;

"National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008;

"person day" means one normal working shift of carrying out construction work by a person on a construction site;

"principal contractor" means an employer appointed by the client to perform construction work;

"Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

"Professional Technologist" means a person holding registration as a Professional Engineering Technologist in terms of the Engineering Profession Act, 2000;

"provincial director" means the provincial director as defined in regulation 1 of the General Administrative Regulations, 2003:

"scaffold" means a temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

"shoring" means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation;

"structure" means-

- any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling;

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"suspended platform" means a working platform suspended from supports by means of one or more separate ropes from each support;

"temporary works" means any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work;

"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

"tunneling" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral.

Reference should be made to the following documentation in conjunction with this Safety Specification (including existing surveys, drawings and reports):

Tender documents
Drawings
ACSA safety specification

IMPORTANT NOTE:

This Health and Safety Specification has been prepared to comply with the requirements of the Construction Regulations 2014.

1.2 BACKGROUND TO THE HEALTH AND SAFETY SPECIFICATION

Historically, the Construction Industry has had a poor health and safety record. Due to the complex and potentially dangerous operations being undertaken, there is a high risk of incidents, accidents and injuries. In many instances poor adherence to the Act and Regulations has resulted in severe consequences for Health and Safety performance. The Client is determined that the highest Health and Safety standards will prevail throughout the Contract and that there will be full commitment from all parties involved.

To achieve this goal the Client has prepared this Health and Safety Specification. The Health and Safety Specification sets out guidelines and minimum levels of awareness and guidance for Health and Safety requirements for the project. Contractual responsibility for adhering to these requirements rests with the Contractors. All employees are encouraged to be pro-active in compliance.

The Client is committed to ensuring the highest Health and Safety standards for all work undertaken within the Contract.

Contractors as employers are fully responsible and accountable for compliance with all Health and Safety requirements.

IMPORTANT NOTE:

Compliance with the Occupational Health and Safety Act and Regulations shall not be limited to this Health and Safety Specification and definitions contained in this document.

Contractors shall be conversant with the requirements and effects of Health and Safety legislation upon their activities, in particular the Construction Regulations, 2014, and the Occupational Health and Safety Act, 1993, and to have made adequate resource in their tender submission to comply with all legislative requirements.

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The Contractor's personnel will be responsible for the auditing of the implementation of the Health and Safety Specification and maintaining the document control and record systems associated with the Health and Safety Specification. The Client will conduct Health and Safety audits of the works too.

1.3 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION

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.

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 principal contractor or appointed contractor as per Construction Regulation 5(1) (o) and section 5 of this document.

The purpose of this site specific Health and Safety Specification is to comply with legal requirements and to provide health and safety information about specific project risks known by the Client, Designer and Client Agent to be applicable to this project. This document also provides minimum health and safety requirements, standards and expectations that the principal contractor and contractors must adhere to.

The Contractor must take into account all information in this specification and ensure that their tenders include adequate resource and competence to deal with the matters detailed herein so that all relevant contents are dealt with in a way which is in compliance with legislation and the ethical concerns for the safeguarding of employees, contractors and other persons affected by the construction activities.

The Health and Safety Specification will be implemented during construction of the works and any construction activity that the Client has control over.

This will also assist in ensuring that all the costs related to the compliance with Occupational Health Act 85 of 1993 and the Construction Regulations 2014, as well as this Health and Safety Specification, are taken into consideration at Tender stage.

No advice, approval of any document required by the Health and Safety Specification such as hazard identification and risk assessment action plans or any other form shall be construed as an acceptance by the Client of any obligation that absolves the Contractor from achieving the required level of performance and compliance with legal requirements.

Further, there is no acceptance of liability by the Client which may result from the Contractor failing to comply with the Health and Safety Specification unless the Client has issued an instruction to any requirement, i.e. the Contractor remains responsible for achieving the required performance levels.

1.4 IMPLEMENTATION OF THE HEALTH AND SAFETY SPECIFICATION

This Health and Safety Specification forms an integral part of the Contract, and Contractors shall make it an integral part of their Contracts with Sub Contractors and Suppliers. Contractors employed by the Client are to ensure that the provisions of the Health and Safety Specification are applied both on the site and in respect of all off site activities relating to the project, in particular in transport activities and project dedicated off site fabrication works.

The Contractor shall enforce the provisions of the Health and Safety Specification amongst all sub contractors and suppliers for the project.

The Contractor shall sign the acknowledgment on the last page of this safety specification that he/she has familiarized him/herself with the content of the Health and Safety Specification and shall comply with all obligations in respect thereof.

The successful Contractor will be required to compile a Health and Safety Plan based on the requirements of the Occupational Health Act 85 of 1993 and these Specifications, which will need to be approved by Client prior to commencement with construction work.

1.4.1 Client Duties

In terms of the Construction Regulations 2014 the Client (or their Agent, where appointed) has legal duties. Where an Agent (refer to "definitions" section of this document) is appointed in terms of this project, these Health and Safety duties assigned will also apply.

All references to "Client" will apply to their appointed "Client Agent", where so appointed, in this Health and Safety Specification.

The Client must:

- Prepare a baseline risk assessment for the construction work
- Prepare a suitable, sufficiently documented and coherent site specific Health and Safety specification for the intended construction work, based on the baseline risk assessment
- Include the health and safety specification in the tender documents
- Ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures
- Ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely
- Take reasonable steps to ensure co-operation between all contractors appointed by the client to enable each of those contractors to comply with the regulations
- Ensure, before work commences, that every principal 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 (Act no 130 of 1993)
- Appoint each principal contractor in writing for the project, or part thereof
- Discuss and negotiate with the principal contractor the contents of the principal contractor's safety plan and thereafter finally approve that plan for implementation
- Ensure that a copy of the principal contractor's health and safety plan is implemented and maintained
- Ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days
- Ensure that a copy of the health and safety audit report is provided to the principal contractor within 7 days after the audit
- Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the principal contractor's health and safety plan for site
- Where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely
- Ensure that the health and safety file is kept and maintained by the principal contractor.
- Where the client requires additional work to be performed as a result of a design change or error in construction due to the actions of the client, the client must ensure that sufficient safety information and appropriate additional resources are available to execute the required work safely.
- Where more than one principal contractor is appointed, the client must take reasonable steps to ensure co-operation between all principal contractors and contractors to ensure compliance with the Regulations
- Where the Client has appointed a Client Agent for the project, their details for this project are contained in the Project Directory section of this health and safety specification.

1.4.2 Designer Duties

It must be noted that the Designer also has Health and Safety duties assigned in terms of the Construction Regulations. Where the contractor fulfils a design function in terms of this project (refer to "definitions" section of this document), these duties will also apply. Please refer to Regulation 6 of the Construction Regulations 2014.

Please note that the designer of temporary works must ensure that:

- all temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
- the designs of temporary works are done with close reference to the structural design drawings issued by the contractor, and in the event of any uncertainty consult the contractor;
- all drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and
- the loads caused by the temporary works and any imposed loads are clearly indicated in the design.

1.5 PROJECT DIRECTOR	1.5 PROJECT DIRECTORY					
Project Client	ACSA	Tel: 021 937 1210				
		Cell: 084 717 1832				
Contact Person	Keegan von Düring	e-mail: Keegan.vonDuring@airports.co.za				
Civil Engineer	Mariswe	Tel: 021 761 6999				
		Cell: 082 333 6920				
Contact Person	Riaan Viviers	e-mail: riaanv@mariswe.com				
Electrical Engineers	TBA	Tel: TBA				
		Cell: TBA				
Contact Person		e-mail: TBA				
Safety Department (ACSA)	ACSA	Tel: 021 937 1293				
(ACSA)		Cell: 082 448 1872				
Contact Person	Siann Graham	e-mail: Siann.Graham@airports.co.za				
Fire and Rescue Department (ACSA)	ACSA	Tel: 021 937 1211				

1.5 PROJECT DIRECTORY						
Other Persons with a Design Input	Thembakele Consulting Engineers	Tel: 011 475 4560				
		Cell: 083 678 4834				
Contact Person	Clever Kativhu	e-mail: ckativhu@thembakele.co.za				
Safety Agent	Safe Working Practice Cape Town	Tel: 021 701 0470				
		Cell: 071 603 2213				
Contact Person	Mark Winter	e-mail: markw@safepractice.co.za				

OTHER PARTIES DIRECTORY			
Department of Labour	Tel: 021 441 8158		
WESTERN CAPE – Fezeka Ngalo	e-mail: fezeka.ngalo@labour.gov.za Cell: 083 365 0681		
Telecommunications, Water, Electricity and Gas	Tel: 021 937 1200		
Company: ACSA			

1.6 PROJECT DETAILS

Description of Works

Rehabilitation of Runway 01/19 and Rehabilitation of the Airside Apron Taxi lane at Cape Town International Airport, including:

Runway

- a) Mill and fill with 25mm UTFC 60wide on runway
- b) Mill and fill with 40mm asphalt 60m widex 110m long
- c) Removal and replacement of the light bases and secondary cables
- d) Reinstate painted markings

Taxiway

- a) Mill and fill with asphalt 8m either side of the centerline along Alpha Apron stand Taxi lane from aircraft stand A17 to the access road adjacent to aircraft stand A3
- b) Removal and replacement of taxi lane centre line lighting
- c) Reinstate painted markings

Please refer to tender documents for the full scope of works and the duration of each phase.

Anticipated Construction Duration

TBA

Provisional Start Date

1 October 2024

Completion Date

26th March 2025 approx

Construction Work Permit Required for the Project?

Yes.

1.7 EXISTING ENVIRONMENT

Hazards particular to this project by virtue of location:

Site is located in Cape Town International Airport (airside). Protection of members of the public and site security are of the utmost importance. All necessary preventative measures must be in place to ensure the safety of members of the public and airport personnel.

Overhead, Above Ground and Underground Services crossing the site:

Overhead: None known in area of the works

Underground: Sewer, storm water and electrical connections

Ground level: Lighting. The location of the existing lights will be surveyed and referenced prior to the removal of lights to ensure that it can be re-installed in the correct locations. The existing light bases in the works area will be removed and back filled with asphalt prior to milling.

Service Drawings available: Yes

Wayleaves required: Not applicable

Permits required: Security access for airside and hot works permits will be required

Isolations required: Please refer to all queries to the project client

Existing structures and surrounding land use (with a significant impact on Health & Safety):

Site is located within Cape Town International Airport. Extreme care must be taken to follow ACSA requirements.

Existing ground conditions and ground survey report:

Please refer to all gueries to the project client

No geo tech report available

Max excavation depth 250mm

Existing Traffic Systems

Condition: 2 way asphalt road in good condition

Restrictions to access: Access to airside is through security controlled access. Only construction vehicles and personnel authorised and having attended the ACSA induction process and having possession of the appropriate permit from ACSA will be allowed access to site. AVOP licence will be required for driving airside (medical will be required).

Speed restrictions: Airport speed limited to be adhered to

1.8 AVAILABLE DRAWINGS

Refer to tender documentation.

1.9 PROJECT HEALTH AND SAFETY REQUIREMENTS

Significant health and safety hazards identified by Safety Agent:

Access and Security Permits: No worker will be allowed to gain access to airside without the proper induction, training and security clearance. Access permits must be visible at all times. Any worker failing to comply will be removed from site. Closures of runways and bus ways must be conducted by ARFF HOD. AVOP licence will be required for driving airside. Note that contractor's personnel may not walk across taxi ways.

The available construction window is approximately 4 to 5 hours (excluding setup and cleaning/ inspection for each shift). Construction delays as a result of airport operations infringing on the construction window period should be communicated timeously to the Contractor, in order for him to plan accordingly. Further discussions regarding night-time cargo flight schedules need to be undertaken.

During each shift, the contractor will be required to demarcate the construction work area as per the ICAO guidelines. Runway closures will be confirmed by Air Traffic Navigation Services (ATNS) and managed by the contractor. The traffic accommodation routes for the construction personnel will be provided during construction and managed by the appointed traffic safety officer. Contractor must allow and price for his own personnel to be trained and certified for Practical Radio Telephony and Airside Competency (PARTAC), in order to mitigate the risk of available escorts from ACSA to assist with construction shift escorting.

The work zones will be closed unless there is an emergency. In an event of an emergency the runway will be cleared. All work on runway and taxi lane is limited to night time work only. There will be limited day time work for establishment, any clearing, etc.

Hot Works – Hot works may only be carried out after a permit has been issued by Fire and Rescue department of ACSA. No hot works may be carried out in any re-fuelling areas.

General Safety - Please note that all construction works areas MUST be securely barricaded off against unauthorised access by members of public and airport staff.

Existing live services - There are above ground and underground services present in the works areas. All necessary precautions must be taken to prevent accidental contact with these services, to prevent damage or risk of causing of injury during construction process

Electrical work - may only be undertaken after the requisite isolations and permits have been obtained from ACSA and all required safety measures are in place. All required personal protective equipment must be worn. Live commissioning may only be undertaken by trained and competent contractor's personnel who are authorised and supervised by competent personnel provided by the contractor, and, if so identified, the project client and professional team.

Traffic management: Delivery of materials and the safe movement of construction vehicles will be controlled by means of a traffic management plan to alleviate any congestion or interference with the public delivery roads for entry/exit. Where parking bays are closed airside to facilitate safe working procedures by the contractor, the relevant department at ACSA must be contacted to obtain approval for such closure.

Other construction hazards expected are as follows:

Compacting and Filling

Compactor Operations

Cutting Off Disc

Electrical Commissioning

Electric Tools and Electrical Installations

Fire

Flammable Liquids / Gas

Hand tools

Hazardous Substances

Hot Works

Manual Handling of General Items

Night Work

Noise and Dust

Plant/Vehicle and Equipment Operation

Road Working – in or next to (inc Traffic Management in Service Road)

Transportation of Workers (Only approved permits holders will be allowed on site)

Underground Services

NOTE: Please refer to end of this Health and Safety Specification for the baseline risk assessment for these risks.

ACTIVITIES REQUIRING APPROVED METHOD STATEMENTS (FOR HEALTH AND SAFETY)

Please note that a method statement will be required for all high risk activities on site.

This will include but is not limited to:

- Traffic management on service road
- Rubble removal and environmental control.
- Delivery of materials to designated areas.
- Emergency Evacuation plans and procedures that will follow the Airport procedures.

ACTIVITIES REQUIRING PERMITS (FOR HEALTH AND SAFETY PURPOSES)

Permit to Dig / Enter Excavations: not applicable

Permit to Work with Electricity: Liaison with ACSA Electrical Department will be required prior to any work with electrical infrastructure

Confined Space Permit: Daily registers and permits to be completed as required

Hot Works Permit: Liaison with ACSA Fire and Rescue will be required prior to any work with electrical

infrastructure

Temporary Works: not applicable

CONTRACTOR SAFETY OFFICER PROVISION

Records of safety audits undertaken by the Contractor's Safety Officer must be kept on site in the safety file and non-conformances reported by the Safety Officer to the Contractor's management team. All non conformances identified by the Safety Officer must be investigated and corrective action taken by the Contractor to prevent re-occurrence.

A full time safety officer is required to be appointed by the Principal Contractor. Please note that the safety officer must be professionally registered with SACPCMP.

These audits must include safety, health and environmental issues.

It must be noted that the Safety Agent and ACSA will conduct safety audits and defects noted will be reported to the Principal Contractor for remedial action The Safety Agent / ACSA will 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.

MEDICAL CERTIFICATE OF FITNESS

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template.

MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

A 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.

TRAFFIC MANAGEMENT

All workers to adhere to ACSA Airside traffic rules and regulations at all times.

Please note that traffic management plan may be required for work next to the service road and that a traffic safety officer may be required.

ENVIRONMENTAL CONDITIONS

Contractor must take into account adverse weather conditions on site activities and implement control measures to mitigate risk. This includes risk of exposure to excessive heat, cold, rain and wind. All rubble must disposed of in an FOD approved closed skip.

ARRANGEMENTS FOR ACCESS, PARKING, DELIVERIES, ETC

Access to site by Construction Vehicles: Only approved drivers with permits will gain access to airside. Access via Foxtrot 3 and Foxtrot 3 Alpha. Contractor's vehicles will be inspected at those points.

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Access to site by Construction Workers and Visitors: All visitors to make arrangements prior to visiting site to gain access. All visitors to follow ACSA Airside security procedures. Selected contractors and delivery vehicles with permits will be allowed access to site.

ARRANGEMENTS FOR SITE CAMP, ABLUTIONS AND YARD				
Site camp location and set up				
• Restrictions /	requirements:	}		
Storage areas	:	} } }	Contractor to advise in consultation with Project Client	
• Security: the tenderer's attention is drawn to the 'SITE INFORMATION' pack that further refers to site establishment and logistics for site camp and airside specifics. The site information pack can be obtained from ACSA.				
Ablutions and Welfare Arrangements Contractor to supply ablutions and facilities in line with the Construction Regulations 2014, refer to section 2.31 of this health and safety specification regarding the below. Please note that toilets should be provided with built in facilities for hand washing:				
• Toilets:	}			
Washing facili	ties: }	Contractor to provide welfare facilities as per tender requirements		
Drinking Water	er: }			
• Shelter:	}			
• Showers:	}			
PROTECTION OF SITE AGAINST UNAUTHORISED ACCESS BY PUBLIC				
Excavation Fencing: Note that excavations accessible to public, or adjacent to public roads / thoroughfares, must have (1) barrier / fence of at least 1m in height, and (2) warning illuminates at night or when visibility is poor, or have other suitable precautionary measures if of both these are not practicable.				
General Fencing of Site: Note that construction sites in built up areas adjacent to public way must be fenced off and have controlled access points. All fencing/hoarding must be painted as per ACSA requirements and be FOD approved.				
Warning Notices : Warning signs must be properly displayed as per requirements. Signs to be FOD approved and properly secured.				
PERSONAL PROTECTIVE EQUIPMENT (PPE)				
The Client requires the Contractor to ensure that employees (and others under his/her control) wear the following minimum PPE:				
Overalls: Yes, all workers must be clearly identifiable				
Safety Harnesses: n/a				
Hard Hats: Yes, must be worn at all times				

Reflective Vests: Yes, all workers must be clearly visible

Safety Footwear: Yes, must be worn at all times

Goggles / gloves / ear defenders / respiratory protection: Yes, must be worn at all times as activity

requires

Specialist Equipment (eg: for confined Spaces): TBA

HAZARDOUS SUBSTANCES

The following materials and substances have, or may have, to be used in the works and are identified as potentially posing special health and / or safety hazards during the project. Appropriate measures will need to be specified for their control:

Cement, Bitumen Petrol, Thinners, Diesel, Road Marking Paint

1.10 INTERFACE AND RESTRICTIONS BY CLIENT

Contractor must note that the following Client activities will continue during construction: Terminal and airport operations will continue during construction works. Construction works may not interfere with the safe operation of the airport. All necessary permits required by ACSA to be in place must be in place before any works commence.

Please note that it is a strict requirement that ACSA's safety specification requirements are also complied with.

The following Client safety rules and/or requirements are to be observed:

All workers are to receive AIT and AVOP induction prior to commencement of work on site. No workers will be allowed on site without his/her permit. Escorts may be available. Other safety rules and requirements to be advised at induction. Please also refer to tender document.

Please note the following:

- Closed skips to be used for the storage of debris and materials.
- Safety signage must dearly stipulate access routes. PPE signage (hardhats, safety shoes, ear and eye protection, safety harnesses and high visibility vests) must be displayed.
- Clearly display emergency numbers and procedures
- No material may be used airside that is classified as foreign object debris (ex: danger tape)
- Extra precautions must be in place for the usage of the crane on site as per AVSEC and CAA requirements.
- Warning signs to be displayed for all ACSA approved vehicles

Restrictions on times, access or other restrictions by Client

Because construction work must be conducted with minimal disruption to airport operations, restrictions may be imposed that will determine the times that work can be conducted and the length of the work shift. Extended Contractor Construction hours for work impacting on operations and passenger comfort will be set in accordance with flight schedules and off peak periods. Cartage of waste material and deliveries of material will only be allowed during off- peak hours as stipulated. The delivery and

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erection of unusual loads will be subject to protocols developed to comply with ACSA requirements. Penalties will apply for working outside working hours as deemed appropriate by ACSA.

1.11 PROJECT CLOSE OUT

The Health and Safety files for the Principal Contractors and all Contractors require closure and handover to the Client at the completion of the project in the form of a consolidated safety file. The following list is an example of what should be included but is not exhaustive. The Safety Agent or the Client may require further information at the time of completion and the Principal Contractor is to ensure that all instructions are responded to. Documentation would include all health and safety related records from the start of the project.

All records to be in hard copy or electronic format and submitted to the Safety Agent for approval in adequately formatted lists and folders. Layout should be logical and in the same order as in the site files.

Consolidated Health and Safety close out file requirements include:

- Health and safety specification (most recent version)
- Principal Contractor's health and safety plan/s
- Site safety organograms
- Legal appointments
- Notification to Department of Labour of commencement of work / Construction Work Permit
- Workman's Compensation Letters of Good Standing for the project
- Full safety files for all Contractors as well as their close out reports
- List of all Contractors who worked on site
- Letters of safety plan approval of Contractors by the Principal Contractor
- Mandatory agreements (section 37.2 agreements)
- Incident and accident records / Occupational Disease records
- Contractor Nonconformance records
- Safety agent's audit reports
- Safety Officer reports
- Method Statements
- Risk assessments
- Safe work procedures
- Medical surveillance certificates of fitness. Medical records are to be kept according to the Occupational Health and Safety Act, as amended.
- All temporary works drawings (suspended beams/scaffolds, etc.)
- Copies of test results, policies, and procedures for environmental monitoring (silica, noise, dusts, etc.)
- Detailed registers of all material used
- Copies of all Checklists completed

1.12 SAFETY FILE RETURN TO CLIENT

The consolidated Health and Safety Files for the Project is to be handed over by the Principal Contractor to the Client upon Project Completion in either hard copy or electronic format.

2.0 FURTHER REQUIREMENTS

2.1 Duties of Principal Contractor / Contractor in terms of Construction Regulations 2014

A Principal Contractor must:

- 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, which 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;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the client, the client's agent or a contractor; and
- on appointing any other contractor, in order to ensure compliance with the provisions of the Act
 - 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;
 - ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
 - ensure that no contractor is appointed to perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - 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;
 - appoint each contractor in writing for the part of the project on the construction site
 - take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
 - ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
 - stop any contractor from executing construction work which is not in accordance with the dient's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
- 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;
- discuss and negotiate with the contractor the contents of their health and safety plan and finally approve that plan for implementation;
- ensure that a copy of both the principal contractor and contractor's health and safety plan is available on request to an employee, an inspector, a contractor, the client or the client's agent;

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- hand over a consolidated health and safety file to the client upon completion of the construction work, to include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- 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;
- 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.

A contractor must prior to performing any construction work-

- 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 and provided by the principal
 contractor, which 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;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the dient, the client's agent or the principal contractor;
- before appointing another contractor to perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- co-operate with the principal contractor as far as is necessary to enable each of them to comply with the
 provisions of the Act;
- as far as is reasonably practicable, promptly provide the principal 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 a contractor appoints another contractor to perform construction work, the duties that apply to the principal contractor will apply to the contractor as if he or she were the principal contractor.

A 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 these Regulations.

No contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry, and has all necessary personal protection equipment (PPE).

A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

A contractor must at all times keep on his or her construction site 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.

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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 (a template of which can be found in the Construction Regulations, 2014).

2.1.1 Mandatory 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.

2.2 Management and Supervision of Construction Work

A 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.

A 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.

Where the construction manager has not appointed assistant construction managers, or, in the opinion of an inspector, a sufficient number of such assistant construction managers have not been appointed, that inspector must direct the construction manager in writing to appoint the number of assistant construction managers indicated by the inspector, and those assistant construction managers must be regarded as having been appointed.

No construction manager appointed in terms of the Regulations may manage any construction work on or in any construction site other than the site in respect of which he or 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: Provided that, where the question arises as to whether a construction health and safety officer is necessary, the decision of an inspector is decisive.

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 or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with a statutory body approved by the Chief Inspector and has necessary competencies and resources to assist the 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, and every such employee has, to the extent clearly defined by the contractor in the letter of appointment, the same duties as the construction supervisor: Provided that the designation of such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties.

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Where the contractor has not appointed such an employee, or, in the opinion of an inspector, a sufficient number of such employees have not been appointed, that inspector must instruct the employer to appoint the number of employees indicated by the inspector.

No construction supervisor appointed may supervise any construction work on or in any construction site other than the site in respect of which he or 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.

2.3 Notification of Intention to Commence Construction Work

Not thought to be applicable to these works.

2.4 Construction Work Permit

A client who intends to have construction work carried out, must at least 30 days before that work is to be carried out apply to the provincial director in writing for a construction work permit to perform construction work on projects that will –

- 1. exceed 365 days and will involve more than 3600 person days of construction work; or
- 2. the tender value limit is grade 7, 8 or 9 of the Construction Industry Development Board (CIDB) grading.
 - Grade 7 = R60 000 000
 - Grade 8 = R 200 000 000
 - Grade 9 = No limit

A client may appoint a Construction Health and Safety Agent or Construction Health and Safety Manager to apply for this permit from the Provincial Director and construction work may not commence until the permit has been issued by the Provincial Director.

A copy of this permit will be required to be kept in the principal contractor's safety file, and the site specific number issued by the Provincial Director must be displayed at the site entrance.

A client may appoint a Construction Health and Safety Agent, or Construction Health and Safety Manager based on the scope and risk profile of construction work to represent him/her on matters of health and safety. Provided that, where the question arises as to whether a Construction Health Safety Agent or a Construction Health and Safety Manager is necessary, the decision of an inspector is decisive.

The following minimum documentation will be required during the permit application process:

- Principal Contractor's Health and Safety Plan CR 5(1)(m)
- Baseline Risk Assessment CR 5(1)(a)
- Appointed Principal Contractor's Letter for Good Standing as per CR 5(1)(j)
- Issue Register signed by Designer CR 5 (1)(c)
- Issue Register signed by Principal Contractor
- Declaration signed by Designer CR 5(1)(d) and CV
- Principal Contractor made adequate provision for the cost of health and safety measures (Bill of Quantities) CR 5(1)(g)
- Proof of Principal Contractor's competency and resources to carry out the construction work safely CR 5(1)(h)
- Appointment Letter for Construction Manager, CV, Certificates and List of projects
- Appointment Letter of Safety Officer & Safety Officer's Registration for SACPCMP

• Principal Contractor's Appointment Letter CR 5(1)(k), Company Profile and CIDB grading

After approval of the Construction Work Permit any changes made to the appointed persons on the annexure 1 must be submitted to Department of Labour for approval before the appointed persons are allowed to commence with their tasks.

PLEASE NOTE THAT THE CONSTRUCTION MANAGER (8(1)) NAMED ON THE CONSTRUCTION WORK PERMIT MUST BE THE SAME PERSON THAT ACTS AS THE CONSTRUCTION MANAGER ON SITE, IF THIS WILL NOT BE THE CASE FOR SOME REASON THEN THE SAFETY AGENT MUST BE NOTIFIED OF THE CHANGE BY THE PRINCIPAL CONTRACTOR AT LEAST 7 DAYS BEFORE THE CHANGE IS MADE SO THAT THE SAFETY AGENT CAN AMEND THE CONSTRUCTION WORK PERMIT APPLICATION AND ADVISE THE DEPARTMENT OF EMPLOYMENT AND LABOUR ACCORDINGLY.

2.5 Assignment of Contractor's Responsible Persons to Manage Health and Safety on Site

The Contractor shall submit management and supervisory appointments as well as any relevant appointments in writing (as stipulated by the Construction Regulations 2014 and the Occupational Safety and Health Act 1993), prior to commencement of work (refer to **Annexure B** at the end of this Health and Safety Specification).

2.6 Competency for Contractor's Responsible Persons

The Contractor's responsible persons shall be competent in health and safety and be familiar with the Occupational Health and Safety Act 1993, and applicable regulations. Valid proof of pertinent health and safety courses attended by such persons will be required to be presented to the Client.

2.7 Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

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.

2.8 Occupational Health and Safety Policy

The Contractor shall submit their Health and Safety Policy, prior to construction commencement, signed by the Chief Executive Officer. The Policy must outline objectives and how they will be achieved and implemented within the company operations.

2.9 Health and Safety Organogram

The Contractor shall submit an organogram, prior to construction commencement, outlining the Health and Safety Site Team that will be assigned to the project, if successful with the tender. In cases where appointments have not been made, the organogram shall reflect the position. The organogram shall be updated, when there is a change in the site team.

2.10 Risk Assessments

Baseline Risk Assessment

The Client shall cause a baseline risk assessment to be conducted by a competent person before the design process and tender process commence, and the assessed risks shall form part of the health and safety specifications.

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The Contractor must, before commencement of any construction work, and during 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:

- The identification of the risks and hazards to which persons may be exposed to;
- An analysis and evaluation of the risks and hazards identified; based on a documented method
- A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- A monitoring plan; and
- A review plan

The Contractor must ensure that, as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in a risk assessment.

The Contractor must ensure that all employees under his 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.**

The 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 determined in the risk assessment monitoring and review plan of the relevant site.**

The Contractor must consult with the health and safety committee or with a representative trade union or representative group of employees if no health and safety committee exists, on the monitoring and review of the risk assessments for the site.

The Contractor must ensure that copies of risk assessment for this site are available on site for inspection purposes by interested parties (inspector, the client, client's agent, any contractor, any employee, a representative trade union, a health and safety representative or safety committee member.

A Contractor must review the relevant risk assessment where changes are effected to the design and/or construction that result in a change to the risk profile, or when an incident has occurred.

Preventative measures must first address the elimination of the hazard or risk. Should PPE be required to reduce risk, the equipment or clothing to be used must be SABS approved.

In general the Contractor must ensure that the Risk Assessment involves identifying the hazards present in a work activity on site. This is followed by an evaluation of the extent of the risk involved taking into account those precautions already being taken.

The following general principle should be followed when conducting a risk assessment:

- All relevant risks and/or hazards should be systematically addressed;
- The risk assessment should address what actually happens in the workplace during the work activity;
- All employees and those who may be affected must be considered, including maintenance staff, security guards, visitors and subcontractors;
- The risk assessment should highlight those groups and individuals who may be required to work alone or who have disabilities;

- The risk assessment process should take into account the existing safety measures and controls.
- The level of detail on a risk assessment should be appropriate to the level of risk.

2.11 Health and Safety Representative(s)

The Contractor shall ensure that Health and Safety Representative(s) is/are elected and trained to carry out his / her functions. The appointment must be in writing. The Health and Safety Representative shall carry out regular inspections, keep records and report to the supervisor to take appropriate action. He / she shall attend Health and Safety Committee Meetings. The Health and Safety Representative shall be part of the team that will investigate incidents, accidents and non-conformances.

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 work place. 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.

2.12 Health and Safety Committee

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.

2.13 Medical Certificate of Fitness

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template (refer to the Construction Regulations 2014 on the Department of Labour website for a sample of this form).

2.14 Health and Safety Training

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The Contractor shall quarterly conduct a training needs analysis to ascertain what health and safety training is required. A plan of action should be devised and forwarded to the Client for records. Once the identified people have attended the training, the Contractor must provide the Client with copies of certificates obtained.

2.14.1 Induction

No Contractor may allow or permit any employee or person to enter site unless they have undergone health and safety induction training pertaining to the hazards prevalent on site at the time of entry. This includes visitors to site. The Contractor must ensure that visitors to site have the necessary protective equipment (PPE). A copy of attendance registers of all employees who attend inductions shall be kept.

2.14.2 Awareness

The Contractor shall conduct periodic toolbox talks on site, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be signed by all attendees. This record of who attended and the content of the topic will be kept on the site health a safety file as evidence of training.

2.15 Competency

After the Contractor has identified the training to be conducted as part of the competency requirement, and based on Risk Assessment, he shall send the relevant persons on appropriate courses and keep certificates of training for reference. Familiarity with the Health and Safety Act and Regulations is an integral part of the definition of competence.

2.16 General Record Keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the Health and Safety Specification and the Occupational Health and Safety Act. The contractor shall ensure that all records of incidents, spot fines, training etc. are kept on site. All documents shall be available for inspection by the Client, or the Department of Labour's Inspectors.

2.17 General Inspection, Monitoring and Reporting

The Contractor shall carry out inspections as required by this Health and Safety Specification, as well as by health and safety legislation.

2.18 Emergency Procedures

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

- List of key personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the emergency; and
- Information on hazardous materials / situations, including each material's hazardous potential impact or risk on the environment or human and measures to be taken in the event of an accident.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, dangers as a result of riot / service deliver protests / intimidation, etc. The Contractor shall advise the Client in writing of any on-site emergencies, together with a record of action taken, within 24 hours of the emergency occurring. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and available to site personnel.

2.19 First Aid Box and First Aid Equipment

The Contractor shall provide first aid box/es and appoint, in writing, First Aider(s) for this project in line with the results of the Contractor's risk assessment for the project, this health and safety specification as well as the provisions of the General Safety Regulations. The appointed First Aider(s) are to be sent for accredited first aid training before starting on site. Valid certificates are to be kept on site.

First Aid box/es must be adequately stocked at all time, accessible and be controlled by a qualified First Aider. If required by the Client, the Contractor shall have a stretcher on site to be used in case of a serious incident.

2.20 Accident / Incident Reporting and Investigation

The Principal Contractor must ensure that all incidents/accidents (this includes near miss, first aid and medical 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.

The Client reserves the right to conduct investigations into any incidents that they deem fit and the Contractor is required to provide full co-operation in this regard.

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

In case of medical and/or fire emergency contact ACSA Fire & Rescue Services: **(021) 937 1211 or 1249**

NOTE: the above mentioned services will incur a cost by the Clinic but is an option available to contractors on site.

2.21 Hazards and Potential Situations

The Contractor shall immediately notify other Contractors of any hazardous or potentially hazardous situations, which may arise during performance of the activities.

2.22 Occupational Health and Safety Signage

The Contractor shall ascertain and provide adequate on site health and safety signage. This signage shall include, but shall not be limited to, Hard Hat / Helmet Area; Safety Shoes to be worn on site; Dust Masks to be worn in areas where there might be exposure to excessive dust; Ear Plugs / Muffs to be worn where there might be noise exposure over 85 db; Gloves; Safety Goggles; Safety Harness, Workers in Excavation, traffic management, etc. The Contractor shall be responsible to maintain the quality and replacement of signage.

2.23 Management Of Contractors by Principal Contractor

The Principal Contractor shall ensure that all contractors under his control are complying with the respective Health and Safety Plans, as well as Health and Safety Legislation.

2.24 Stacking of Materials

In addition to the provisions for the stacking of articles in the General Safety Regulations, 2003, the contractor must ensure that —

- a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site:
- adequate storage areas are provided;
- there are demarcated storage areas; and
- storage areas are kept neat and under control.

2.25 Housekeeping and General Safeguarding on Construction Sites

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, promulgated by Government Notice No. R. 2281 of 16 October 1987, ensure that suitable housekeeping is continuously implemented on each construction site, including-

- the proper storage of materials and equipment;
- the removal of scrap, waste and debris at appropriate intervals;
- 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;
- ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- ensuring that waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out in the regulations;
- 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
- 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.

2.26 Construction Vehicles and Mobile Plant

A contractor must ensure that all construction vehicles and mobile plant-

- are of an acceptable design and construction;
- · are maintained in a good working order;
- are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- are operated by a person who-
 - has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate those construction vehicles and mobile plant;
 - has a medical certificate of fitness to operate those construction vehicles and mobile plant, issued by an occupational health practitioner in the form of Annexure 3.
- have safe and suitable means of access and egress;
- are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guard-rails and crash barriers;
- are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- are equipped with an acoustic warning device which can be activated by the operator;
- are equipped with an automatic acoustic reversing alarm; and
- are inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to
 use and that the findings of such inspection are recorded in a register kept in the construction vehicle
 or mobile plant.

A contractor must ensure that-

- no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;

- the traffic routes are suitable for the persons, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;
- every traffic route is, where necessary, indicated by suitable signs;
- all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress, have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- all construction vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set and ignition secured;
- whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;
- vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- all construction vehicles or mobile plant travelling, working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

2.26.1 Hired Plant and Machinery

The 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:

- Malfunctioning of equipment; and
- Discovery of a suspected defect in the equipment

2.26.2 Road Construction Work

The 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.

2.27 Electrical Installations and Machinery on Construction Sites

A contractor must, in addition to compliance with the Electrical Installation Regulations and the Electrical Machinery Regulations, ensure that —

- 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;
- all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- 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;
- 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
- 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.

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.

2.28 Use and Temporary Storage of Flammable Liquids on Construction Sites

A contactor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2003, ensure that –

- where flammable liquids are being used, applied or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- no person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking
- only the quantity of flammable liquid needed for work on one day is taken out of the store for use;
- 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.
- Employees must wear suitable respiratory equipment
- 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.

2.29 Water environments

Not thought to be applicable to this project.

2.30 Fire precautions on Construction Sites

A contractor must, in addition to compliance with section 2.28 above and the Environmental Regulations for Workplaces, 1987, ensure that –

- all appropriate measures are taken to avoid the risk of fire;
- sufficient and suitable storage is provided for flammable liquids, solids and gases;
- smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- in confined spaces and other places in which flammable gases, vapours or dust can cause danger—
 - only suitably protected electrical installations and equipment, including portable lights, are used;
 - there are no flames or similar means of ignition;
 - there are conspicuous notices prohibiting smoking;
 - oily rags, waste and other substances liable to ignite are without delay removed to a safe place;
 and
 - adequate ventilation is provided;
- combustible materials do not accumulate on the construction site:
- welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
- 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;
- 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;
- a sufficient number of workers are trained in the use of fire- extinguishing equipment;
- where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- the means of escape is kept clear at all times;
- there is an effective evacuation plan providing for all—
 - persons to be evacuated speedily without panic;
 - persons to be accounted for; and
 - plant and processes to be shut down; and
- a siren is installed and sounded in the event of a fire.

2.31 Construction Employees' Facilities

A contractor must, in terms of the Construction Regulations 2014, provide:

- Shower facilities after consultation with the employees or employees representatives, or at least one shower facility for every 15 persons;
- at least one sanitary facility for each sex and for every 30 workers;
- changing facilities for each sex;
- and sheltered eating area.

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.

2.32 Fall protection

Not thought to be applicable to this project.

2.33 Temporary works

Not thought to be applicable

2.34 Excavation

Max excavation depth will be 250mm.

2.35 Demolition Work

Not thought to be applicable.

2.35.1 Structures

Not thought to be applicable.

2.36 Tunneling

Not thought to be applicable to this project.

2.37 Scaffolding

Not thought to be applicable.

2.38 Bulk mixing plant

Not thought to be applicable

2.39 Rope Access Work

Not thought to be applicable to this project.

2.40 Hazardous Chemical Substances (HCS)

In addition to the requirements in the HCS Regulations, the principal contractor must provide proof in the Health and Safety Plan that:

- Material Safety Data Sheets (MSDS's) of the relevant materials / hazardous chemical substances are available prior to use by the contractor. All MSDS's shall be available for inspection by the agent at all times.
- Risk assessments are done at least once every 6 months.
- Exposure monitoring is done according to OESSM and by an Approved Inspection Authority (AIA) and that the medical surveillance programme is based on the outcomes of the exposure monitoring.
- How the relevant HCS's are being/going to be controlled by referring to:
 - Limiting the amount of HCS
 - Limiting the number of employees

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- Limiting the period of exposure
- Substituting the HCS
- Using engineering controls
- Using appropriate written work procedures
- The correct PPE is being used.
- HCS are stored and transported according to SABS 072 and 0228.
- Training with regards to these regulations was given.

The Health and Safety plan should make reference to the disposal of hazardous waste on classified sites and the location thereof (where applicable).

The First Aider must be made aware of the MSDS and trained in how to treat HCS incidents appropriately.

2.41 Noise Induced Hearing Loss

Where noise is identified as a hazard the requirements of the NIHL regulations must be complied with and the following must be included / referred to in the Health and Safety Plan:

- Proof of training with regards to these regulations.
- Risk assessment done within 1 month of commencement of work.
- That monitoring carried out by an AIA and done according to SABS 083.
- Medical surveillance programme established and maintained for the necessary employees.
- Control of noise by referring to:
- Engineering methods considered
- Admin control (number of employees exposed) considered
- Personal protective equipment considered/decided on
- Describe how records are going to be kept for 40 years.

2.42 Explosives and Blasting

Not thought to be applicable to this project.

2.43 Personal Protective Equipment (PPE)

The Contractor shall carry out PPE or clothing needs analysis in accordance with his risk assessment, to determine the necessary PPE or clothing to be used during construction. The Contractor shall make provision and keep adequate quantities of SABS approved PPE or clothing on site at all times.

The Contractor must ensure that personnel are trained in the correct use of PPE to be used.

The Contractor must ensure that lost, stolen, worn out or damaged PPE is replaced as required and receipt signed for by employees on site.

2.44 Asbestos

Not thought to be applicable.

2.45 Pressure Equipment (Including Gas Bottles)

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The Contractor shall comply with Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Providing and maintain appropriate signage in areas where pressure vessels are used, as applicable;
- Inspect equipment regularly and keep records of inspections;
- Providing appropriate fire fighting equipment (Fire Extinguishers).

2.46 Fire Extinguishers and Fire Fighting Equipment

The Contractor shall provide adequate, regularly serviced fire extinguishers located at strategic points on site. The Contractor shall keep spare serviced portable fire extinguishers. The Contractor shall have adequate persons trained or competent to use the Fire Fighting Equipment.

Safety signage shall be posted up in all areas where fire extinguishers are located.

2.46.1 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 time by his/her employees.

2.47 Lifting Machinery and Tackle

The Contractor shall ensure that lifting machinery and tackle is inspected before use and on a monthly basis. The Contractor shall have lifting machinery and tackle inspector who will inspect the equipment at intervals required by the Driven Machinery Regulations, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Regular inspection and servicing is carried out;
- Records are kept of inspections and of service certificates;
- Thorough examinations are carried out by competent personnel at the frequencies required by legislation
- There is proper supervision in terms of guiding the loads which includes a trained banks man to direct and check lifting tackle if it is safe for use.

2.47.1 Cranes

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—

- they are designed and erected under the supervision of a competent person;
- a relevant risk assessment and method statement are developed and applied;
- 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;
- the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- the tower crane operators are competent to carry out the work safely; and
- 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

2.48 Ladders and Ladder work

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The Contractor shall ensure that all ladders are numbered and inspected regularly keeping record of inspections. It should be noted that Aluminium ladders are preferred to wooden ladders.

2.49 General Machinery

The Contractor shall comply with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing and training those that use machinery and enforce compliance.

2.50 Portable Electrical Tools

The Contractor shall ensure that use and storage of all explosive actuating fastening devices and portable electrical tools are in compliance with relevant legislation.

The Contractor shall consider that:

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing is provided and maintained.

2.51 High Voltage Electrical Equipment

The Contractor shall ensure that, where the work is under, on or near high-voltage electrical equipment the Electrical Installation Regulations, together with safety instructions (Regulations of the Owner of the Equipment) are complied with. Such equipment includes:

- Eskom and the Local Authority equipment
- The Contractor's own power supply; and
- Electrical equipment being installed but not yet taken over from a Contractor by The Client.

2.52 Public Health and Safety

The Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from on site activities and the precautions to be observed to avoid or minimize those dangers. Appropriate health and safety signage shall be posted at all times.

2.53 Night Work

The Contractor shall not undertake any night work without prior arrangement and a written permit from the Client. The Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in work being stopped. Please note that for this contract only working at night will occur with daytime work (off Runway and Taxilane) to be approved.

2.54 Environmental Conditions and Flora and Fauna

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, etc. The Contractor's risk assessment process must take into account the risks associated with such weather conditions. The same is true when working in an environment where there is a risk to employees' health and safety from presence of poisonous flora, or wildlife (including bees, snakes, etc). The Contractor's risk assessment process must take these risks into account.

2.55 Occupational Health

Exposure of workers to occupational health hazards and risks are very common in any work environment, especially in construction. Occupational health hazards and risks exposure is a major problem and all Contractors are to ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards and risks.

The occupational hazards and risks may enter the body in three ways:

- Inhalation through breathing e.g. cement dust;
- Ingestion through swallowing maybe through food intake;
- Absorption through the skin (pores) e.g. painting or use of thinners.

The contractor is required to ensure that all his personnel are medically fit prior to being allowed onto the work site.

All Contractors should ensure that Occupational Hygiene surveys are conducted as per the Occupational Health and Safety Act to ensure employees are not exposed to hazards. Risk Assessments should identify areas where surveys are to be conducted.

2.56 Suspended Platforms

Not thought to be applicable to this project.

2.57 Material Hoists

Not thought to be applicable.

2.58 Explosive Actuated Fastening Device

Not thought to be applicable to this project.

2.59 Confined Spaces

Not thought to be applicable

2.60 Alcohol and drugs (GSR 2)

- 1. A Contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a site.
- 2. No employee shall be under the influence of or have in his or her possession or partake of or offer any other person intoxicating liquor or drugs.
- 3. An Employer or a user, as the case may be, shall, in the case where a person is taking medicines, only allow such person to perform duties at the site if the side effects of such medicine do not constitute a threat to the health or safety of the person concerned or other persons at such site.

2.61 General Practices when Working at Heights

Not thought to be applicable to this project.

2.62 Traffic Accommodation

All traffic signs must be displayed as per the traffic management plan drawings.

Size of signs used must be as per the traffic management drawings and all signs to be visible and in good condition.

- Traffic management Plan issued as per ICAO. Must be approved by the client and professional team.
- Plans for signage deployment must be in order and must be placed correctly.
- Traffic management plan must be submitted and must be suitable for the tasks being performed.
- Traffic plan must be implemented and controlled by the sites Traffic safety officer and flag persons.
- Jersey barriers, where used, to be linked.
- No signs to be obstructed.
- STOP/GO structures must be protected against being struck by vehicles (e.g. new jersey barriers)
- Road marking buggies/vehicles must be protected by escort vehicles front and rear.
- Displayed traffic signs must be maintained in a daily register to be checked morning and evenings after works have been finalised.

Traffic Safety Officer must check signage daily and Responsible Person must sign it off daily/as per schedule.

2.63 Ventilation and Lighting in the Work Place

Every Employer shall cause every workplace in his undertaking to be lighted in accordance with the illuminance values specified in the Schedule to the General Safety Regulations:

Provided that where specialised lighting is necessary for the performance of any particular type of work, irrespective of whether that type of work is listed in the Schedule or not, the Employer of those employees who perform such work shall ensure that such specialised lighting is available to and is used by such employees.

The Contractor must ensure that:

- the average illuminance at any floor level in a workplace within five meters of a task is not less than one fifth of the average illuminance on that task;
- glare in any workplace is reduced to a level that does not impair vision;
- lighting on rotating machinery in such that the hazard of stroboscopic effects is eliminated; and
- luminaires and lamps are kept clean and, when defective, are replaced or repaired forthwith.

With a view to the emergency evacuation of indoor workplaces without natural lighting or in which persons habitually work at night, every Employer shall, in such workplaces, provide emergency sources of lighting which are such that, when activated, an illuminance of not less than 0.3 lux is obtained at floor level to enable employees to evacuate such workplaces: Provided that where it is necessary to stop machinery or shut down plant or processes before evacuating the workplace, or where dangerous materials are present or dangerous processes are carried out, the illuminance shall be not less than 20 lux.

The Contractor must ensure that the emergency sources of lighting prescribed above:

- are capable of being activated within 15 seconds of the failure of the lighting prescribed by subregulation (1);
- will last long enough to ensure the safe evacuation of all indoor workplaces;
- are kept in good working order and tested for efficient operation at intervals of not more than three months; and
- where directional luminaires are installed, these are mounted at a height of not less than two meters above floor level and are not aimed between 10° above and 45° below the horizontal line on which they are installed.

The Contractor must ensure that all rooms, stairways, passageways, gangways, basements, and other places where danger may exist through lack of natural light, to be lighted such that it will be safe.

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The Contractor must ensure that every workplace in his undertaking is ventilated either by natural or mechanical means in such a way that –

- the air breathed by employees does not endanger their safety;
- the time-weighted average concentration of carbon dioxide therein, taken over an eight-hour period, does not exceed one half per cent by volume of air;
- the carbon dioxide content thereof does not at any time exceed three per cent by volume of air;
- the prescribed exposure limits for airborne substances therein are not exceeded; and
- the concentration therein of any explosive or flammable gas, vapour or dust does not exceed the lower explosive limit of that gas, vapour, or dust.

2.64 Nuclear Density Gauge (Troxler)

The use of a Troxler on site must be in line with the SANS 3001 of March 2014. The SANS consists of 5 sections

The in-situ density of road construction materials is only determined in civil engineering using indirect methods such as the nuclear density gauge and sand replacement methods.

This method forms part of a set of methods used to operate nuclear gauges, and includes the following:

- a) administration, handling, and maintenance (see SANS 3001-NG1);
- b) validation of standard calibration blocks (see SANS 3001-NG2);
- c) calibration of a nuclear gauge (see SANS 3001-NG3);
- d) verification of a nuclear gauge (see SANS 3001-NG4):
- e) in situ density determination using a nuclear gauge (see SANS 3001-NG5)

When used Troxlers must be:

- Stored in a dedicated, lockable area and must have a warning signage displayed.
- Must only be transported in a dedicated vehicle with the required signage displayed and by an authorised employee that has been appointed in writing.
- Must have a Troxler Calibration Certificate in place.
- Must have a Troxler Technician Appointment on file and signed and proof of competency within the safety file.

2.65 Ergonomics Regulation of 2019

"competent person" in relation to ergonomics, means a person who— (a) has in respect of the work or task to be performed the required knowledge, training and experience in ergonomics and, where applicable, qualifications specific to ergonomics: provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2008 (Act No. 67 of 2008), those qualifications and that training must be regarded as the required qualifications and training; and (b) is familiar with the Act and the applicable regulations made under the Act;

"ergonomic risk" means a characteristic or action in the workplace, workplace conditions, or a combination thereof that may impair overall system performance and human well-being;

"ergonomic risk assessment" means a programme, process, or investigation to identify, analyse, valuate and prioritise any risk from exposure to ergonomic risks associated with the workplace;

"ergonomics" means the scientific discipline concerned with the fundamental understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well-being and overall system performance;

The ergonomics regulations will apply to any Employer or self-employed person who carries out work at the workplace who may expose any person to an ergonomic risk in the work place and any designer, manufacturer, importer or supplier of machinery, plant, or work systems for the work place.

An Employer must, before the commencement of any work that may expose employees to ergonomic risks, have an ergonomic risk assessment performed by a competent person.

The ergonomic risk assessment must be done at intervals not exceeding two years and must include the following;

- a complete hazard identification and all persons who may be affected by the ergonomic risk.
- how employees may be affected by the ergonomic risks;
- the analysis and evaluation of the ergonomic risks;
- the prioritisation of ergonomic risks.

An Employer must review the relevant ergonomic risk assessment if:

- such assessment is no longer valid;
- control measures are no longer effective;
- technological or scientific advances allow for more effective control methods;
- there has been a change in -
 - the work methods;
 - the type of work carried out; or
 - the type of equipment used to control the exposure; and
 - an incident occurs or medical surveillance reveals an adverse health effect, where ergonomic risks are identified as a contributing factor.

An Employer must ensure that an employee is placed under medical surveillance, which is overseen by an occupational medicine practitioner, if—

- the ergonomic risk assessment referred to in regulation 6 indicates the need for the employee to be placed under medical surveillance; or
- an occupational health practitioner recommends that relevant employees must be under Medical surveillance, in which case the Employer may call upon an occupational medicine practitioner to ratify the appropriateness of such recommendation.

An Employer must ensure that the medical surveillance consists of-

- in the case of a new employee, an initial health examination before the employee commences employment or within 30 days of commencement of such employment;
- a periodic health examination informed by the ergonomic risk assessment, at intervals specified by an occupational medicine practitioner, but not exceeding two years; and
- an exit health examination informed by the ergonomic risk assessment.

2.66 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.

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2.67 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. he 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 and failure to adhere to the OHS Act of 1993 and its regulations.

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Both the Client and the Contractor have a duty in terms of health and safety legislation to do all that is reasonably practicable to make members of the public and others being affected by the construction processes aware of possible risks and put preventative measures in place to mitigate the risks. The public and/or visitors shall go through a brief health and safety induction detailing hazards and risks they may be exposed to and what measures are in place to control these hazards and risks.

OTHER HEALTH AND SAFETY SPECIFICATION REQUIREMENTS

The contractor must be aware of the following additional requirements:

What	When	Output
Awareness training (Toolbox Talks)	At least fortnightly and before hazardous work is carried out	Attendance Register
Health and Safety Committee Meetings	Monthly	Minutes signed by the employer (Contractor) covering: a) Health and Safety Representative Checklist
Health and Safety Reports	Monthly	Report covering: a) Incidents/Accidents and Investigations b) Non conformance c) Health and Safety Training d) HIRA Updates e) Internal and External Audits
General Inspections	As per Health and Safety Specification and OHSA	Report on Health and Safety Specification and OHSA compliance: a) Scaffolding b) Lifting Machinery c) Excavation
General Inspections	Monthly	Covering: a) Fire fighting Equipment b) Portable Electrical Equipment c) Ladders
Record keeping	Ongoing	Covering: a) General complaints b) Fines c) General incidents d) MSDS e) Surveillance Medicals f) Inspection Register g) Dept of Labour Notices
Permits	Before commencement with certain activities	As stipulated by the Health and Safety Specification and the OHSA / Construction Regulations

Key:

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ANNEXURE A

The Contractor shall submit the info below in an Annexure 2 prior to construction commencement.

Item No.	Health and Safety Specification Requirement	OHSA Requirement	Submission date
1.	Notification of Intention to Commence Construction	Construction Regulations 2014	At least 7 days before commencement on site
2.	Construction Work Permit	Construction Regulations 2014 (but only comes into effect from August 2015, and only with certain size and duration projects)	At least 30 days prior to project commencement
3.	Assignment of Responsible Person to Manage Building Work via Health and Safety Organogram	Construction Regulations 2014	Before commencement on site
4.	Competency for Health and Safety Positions	Client / Client Agent requirement	Before commencement on site
5.	Compensation of Occupational Injuries and Diseases Act (COIDA) 130 of 1993	COIDA Requirement	Before commencement on site
6.	Occupational Health and Safety Policy	Client / Client Agent requirement	Before commencement on site
7.	Risk Assessment, Safety Plan and Fall Protection Plan, Demolition Method Statement	Client / Client Agent requirement	Before construction work commences
8.	NAT Projects OHS Monthly report	Client / Client Agent requirement	During the project

ANNEXURE B - The contractor shall make the following appointments, as required:

Chief Executive Officer (OSHACT 16(1)
Contract Director/Manager (OSHACT 16(2)
Construction Manager (CR 8(1)
Construction Supervisor (CR 8(7)
Assistant Construction Supervisor (CR 8(8)
Construction Safety Officer (CR 8(5)
Traffic Safety Officer
Safety Representative (where > 20 employees on site)
Temporary work Designer (CR 12(1)
Temporary work Supervisor (CR12(2)
Construction risk assessor (CR 9(1))
Excavation Supervisor (CR13(1)(a)
Demolition Supervisor (CR14(1)
Scaffold Supervisor (CR16(1)
Suspended Platform Supervisor (CR17(1)
Material Hoist Inspector (CR19(8)(a)
Material Hoist Operator (CR19(6)
Bulk Mixing Plant Supervisor (CR20(1)
Bulk Mixing Plant Operator (CR20(2)
Controller of Explosive Actuated Fastening Devices Nails, Cartridges or Studs Issue and Collection (CR21(2)(g)(1)
Construction Vehicle and Mobile Plant Operator (CR23(1)(d)(i)
Controller of Temporary Electrical Installations (CR24(c)
Stacking Supervisor (CR28(a)
Fire Extinguishing Equipment Inspector (CR29(h)
Fall Protection Plan Developer (CR 10(1)(a)
Incident Investigator (OSHACT 9(2)

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Competent Person – Confined Spaces (GAR 5(1)

BASELINE RISK ASSESSMENT FOR PROJECT

Irrespective of the risk presented on site, it will be ensured that sufficient supervision is in place on site, that personnel are trained in accordance with legislation, including the requirement for site specific inductions on site to inform personnel on site of the risks and hazards applicable to the site. Site supervision is responsible for ensuring that the control measures required below are implemented on site.

	HAZARD	RISK	MINIMUM CONTROL MEASURES
	Compacting and Filling	Contact with tipping materials Contact with moving plant Vehicles/personnel falling into excavations Contact with underground services	 Trained banksman to control vehicles movement Only trained personnel use plant Personal Protective Equipment to be worn Personnel to stand dear as materials are being tipped Use stop blocks and signs to warn vehicles of excavations, where applicable Stand dear of plant whilst materials are being compacted Establish position of underground services and protect services from damage
2.	Cutting Off Disc	Noise Cuts from machine Fire (particularly at refuelling) Flying debris Blade shattering Contamination by fume created or exhaust fume	 Use competent personnel. Hot works control- fire extinguisher, fire watchman. (Permit may be required) PPE to include gloves, eye protection, hearing protection Solid working position. Clear working area Correct grade of blade must be used. Good ventilation to be provided (forced if necessary). Changing of wheels to be by competent persons only Cut off discs must not be used for grinding (grinding disc thicker) Bystanders to wear hearing protection, as applicable
3.	Electrical Commissioning	Electric shock	Personnel to comply with permits to work issued by client Personal protective equipment to be worn by employees to prevent electric shock First aid treatment to be readily available Only competent and trained persons may decommission or commission electrical equipment
4.	Electric Tools and Electrical Installations	Electric shock Fire	 Electric tools and installations to be in good condition Inspect electric tools before use Do not use electric tools in wet/damp conditions Use personal protective equipment such as insulated gloves Electrical installations register to be maintained, inspected by competent person
5.	Fire	Injuries to workers, pedestrians, residents, road users, damage to property through fire	 No littering on site which could become fire hazard, maintain site in clean condition. No fires to be lit on site. Have a working fire extinguisher at hand at all times. No smoking or naked flame near flammable substances or in unauthorised areas Ensure proper storage/use of Petrol/diesel/flammable substances – post warning notices
6.	Flammable Liquids and Gases (Use of)	Fire Explosion	 No littering on site which could become fire hazard, maintain site in clean condition. Have a working fire extinguisher at hand at all times. No smoking or naked flame near flammable substances or in unauthorised areas Ensure proper storage/use of Petrol/diesel/flammable substances – post warning notices Equipment must be in good condition, maintained Personnel using substances must be trained in safe use and risks

	HAZARD	RISK	MINIMUM CONTROL MEASURES
7.	Hand tools	Injuries caused by use of hand tool Impact with the tool Falls due to access problems Contamination with substance being worked	 Ensure: Tool is correct for job Tool is in good order and suitably sharp Personnel must be competent/instructed in tool usage and tool safely Lighting is sufficient Access is safe, working platform is secure, leading edge is guarded Operative is wearing all necessary PPE
8.	Hazardous Substances	Injuries to workers through use of hazardous substances, eg: injuries to eyes, skin, etc	 Use substances in accordance with data sheet, particularly reference protective clothing required (example: gloves, goggles, etc) Know what First Aid measures are Have welfare facilities available for washing of hands, etc
9.	Lifting Operations	Falling material Crushing by materials Hand injuries to the slinger Toppling crane	 Check test certificate Check examination certificate Check inspection have been carried out Check certificates for lifting equipment (chains, slings, shackles, etc) Ensure lifting gear is rated to carry load (SWL) Ensure materials being lifted are properly packaged and slung. Be aware that there should be a minimum clearance of 600mm between any slewing parts of a crane and any fixed installation to prevent being trapped. Access to the work area during lifting operations is to be restricted to those involved with and trained in the work in hand. Do not allow members of the public to gain access to the area. Only trained banksmen to be used. The crane driver and the banksman are to ensure that the signals given are clearly understood.
10.	Members of Public — Protection of ACSA staff and airport users	Injury to member of public and road users from site works	 Barriers and signage to be in place Workers must warn away any members of public from the works Areas of construction work which are open to ACSA staff or the general public must be closed off if in area of works or otherwise made safe so that no injury occurs. Signage to be displayed in conspicuous positions warning vehicular and pedestrian traffic motorists of construction site movements Refer to plant risk assessment for details on plant safety precautions
11.	Noise and Dust	Breathing in dust can cause long term health problems, noise can damage hearing	 Wear respiratory and hearing protection Dampen down and minimise dust where possible.
12.	Plant or Vehicles and Equipment Operation	Workers injured by passing traffic Road users and pedestrians at risk from plant operation Noise	 Implement traffic protection measures Trained and competent operators must be used Check plant and vehicles on daily basis before use and record inspections. Maintain vehicles in safe condition. Medical certificates of fitness required for construction plant. Crossing of road by construction vehicles or machines must be limited to the practical minimum Plant and vehicles must be fitted with amber rotating beacons and reverse alarms. Wear appropriate protective dothing/equipment, eg: goggles, gloves, ear defenders, etc as appropriate.

	HAZARD	RISK	MINIMUM CONTROL MEASURES
13.	Road Working — working in or next to runway or airport access roads	Injury to workers caused by passing traffic / aeroplanes Injury to road or runway users and pedestrians by works	 Flagmen to be used where interface with airport traffic operations. Traffic management plan to be approved by ACSA No construction activities to commence until adequate provision made to accommodate traffic in accordance with the South African Traffic Signs Manual and ACSA standards. Use safety signage to warn traffic and pedestrians of construction works Where existing access routes and runways are affected by works, must direct traffic away to safe area. Wear reflective waistcoats when working on or near the runway or access road or road shoulder as well as any other required personal protective clothing. Crossing of runway and access roads by personnel must be limited to the practical minimum Use of fencing or other barriers as appropriate
14.	Underground Services	Striking of buried services	 Make all necessary enquiries to establish what services are in the area. Consult drawings and advice from service provider (eg: Municipality or ESKOM) when planning work. Assume all service to be live (Unless confirmation is received to confirm that services are isolated or otherwise made safe). Do not work near live services without authorisation from site management. Comply with the requirements of the safe system of work for underground services. Where available, locate services with a locator Hand dig around services

ISSUE REGISTER

Date of Original Safety Specification Compilation	Compiled By	Issue Date	Revision Date
October 2023	Mark Winter	3/10/23	
Minor Amendments	Mark Winter	18/10/23	17/10/23
Minor Amendments	Mark Winter	8/11/23	7/10/23

Acknowledgement:	
Ι,	representing
the content of this Health and Safety Specification and comply with the requirements of this document, our saf	shall ensure that our employees and contractors on site
Signature of Contractor	 Date
Comments:	