



NEC4 Engineering & Construction Contract (ECC4) 2017, Option B

Between	UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG (WITS) as represented by the Campus Planning and Development Department	
	Reg No. _____	(the <i>Client</i>)
and	[Insert <i>Contractor's</i> registered name at award stage]	
	Reg No. _____	(the <i>Contractor</i>)
for	Supply, Delivery Installation and commissioning of _Model Project_ under Framework contract for Heating, Ventilation, And Air Conditioning (HVAC) Works Within The University Of The Witwatersrand Precincts	
		(the <i>works</i>)
Contents:		Page No
Part C1	Agreements & Contract Data	[•]
	C1.1 Form of Offer and Acceptance C1.2 Contract Data C1.3 Forms of Sureties (if applicable)	
Part C2	Pricing Data	[•]
	C2.1 Pricing assumptions C2.2 The Bill of Quantities	
Part C3	Scope of Work	[•]
	C3.1 <i>Client's</i> Scope C3.2 Scope provided by the <i>Contractor</i> for its design (if any)	
Part C4	Site Information	
Part C5	Annexures: • Bill of Quantities (BoQ) • Scope of work (SOW)	
Framework Contract No.	[Insert at award stage]	

Client: Witness: Contractor: Witness:





Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

Offer

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

THE SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING HVAC SYSTEMS FOR MODEL PROJECTS UNDER THE FRAMEWORK CONTRACT FOR HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) WORKS WITHIN THE UNIVERSITY OF THE WITWATERSRAND PRECINCTS.

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data (which in this case was incorporated in the RFP document for the Framework Contract) and addenda thereto and by submitting this Offer has accepted the RFP Requirements (also referred to as the Conditions of Tender).

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

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

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

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Client: Witness: Contractor: Witness:





ACCEPTANCE

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

The terms of the contract, are contained in:

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

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

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

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

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

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

Signature(s)

Name(s)

Capacity

for the *Client* University of the Witwatersrand, Johannesburg
1 Jan Smuts Avenue, Braamfontein, 2000

Name &
signature of
witness

Date

Client: Witness: Contractor: Witness:





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

Note:

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

No.	Subject	Details
1		
2		
3		

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

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

	For the tenderer:	For the <i>Client</i>
Signature	_____	_____
Name	_____	_____
Capacity	_____	_____
On behalf of	(Insert name and address of organisation)	(Insert name and address of organisation)
Name & signature of witness	_____	_____
Date	_____	_____

Client: Witness: Contractor: Witness:





C1.2 ECC4 Contract Data

Part one - Data provided by the *Client*

[Instructions to the contract compiler: (delete these three notes in the final draft of a tender / contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left-hand column for each statement however other clauses may also use the same data.
2. This symbol [●] is used to denote where data is to be inserted. Delete the symbol when inserting data.
3. In the left-hand column where a note begins with the word, "If -----", either complete the data and delete the note if the option applies or delete the note and the rows of data relevant to that note if the option has not been selected.]

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

1 General

11.1	The <i>conditions of contract</i> are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and secondary Options of the NEC4 Engineering and Construction Contract, June 2017 with amendments January 2019.						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Main Option</td> <td style="padding: 5px;">B</td> </tr> <tr> <td style="padding: 5px;">Option for resolving and avoiding disputes</td> <td style="padding: 5px;">W1</td> </tr> <tr> <td style="padding: 5px;">Secondary Options</td> <td style="padding: 5px;">X1, X2, X5, X7, X11, X14, X15, X16, X18, X21, Z</td> </tr> </table>	Main Option	B	Option for resolving and avoiding disputes	W1	Secondary Options	X1, X2, X5, X7, X11, X14, X15, X16, X18, X21, Z
Main Option	B						
Option for resolving and avoiding disputes	W1						
Secondary Options	X1, X2, X5, X7, X11, X14, X15, X16, X18, X21, Z						
11.2(15)	The <i>works</i> are						
	HVAC Model Project within the University of the Witwatersrand precincts						
10.1	The <i>Client</i> is <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Name</td> <td style="padding: 5px;">University of the Witwatersrand, Johannesburg (WITS)</td> </tr> <tr> <td style="padding: 5px;">Address for communications</td> <td style="padding: 5px;">University of the Witwatersrand, Johannesburg 1 Jan Smuts Avenue, Braamfontein, 2000</td> </tr> <tr> <td style="padding: 5px;">Address for electronic communications</td> <td style="padding: 5px;">Jason.huang@wits.ac.za</td> </tr> </table>	Name	University of the Witwatersrand, Johannesburg (WITS)	Address for communications	University of the Witwatersrand, Johannesburg 1 Jan Smuts Avenue, Braamfontein, 2000	Address for electronic communications	Jason.huang@wits.ac.za
Name	University of the Witwatersrand, Johannesburg (WITS)						
Address for communications	University of the Witwatersrand, Johannesburg 1 Jan Smuts Avenue, Braamfontein, 2000						
Address for electronic communications	Jason.huang@wits.ac.za						
10.1	The <i>Project Manager</i> is <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Name</td> <td style="padding: 5px;">Yen-Hsiang Huang</td> </tr> <tr> <td style="padding: 5px;">Address for communications</td> <td style="padding: 5px;">3 Jubilee Road, Parktown, Johannesburg, South Africa, 2193</td> </tr> <tr> <td style="padding: 5px;">Address for electronic communications</td> <td style="padding: 5px;">Jason.huang@wits.ac.za</td> </tr> </table>	Name	Yen-Hsiang Huang	Address for communications	3 Jubilee Road, Parktown, Johannesburg, South Africa, 2193	Address for electronic communications	Jason.huang@wits.ac.za
Name	Yen-Hsiang Huang						
Address for communications	3 Jubilee Road, Parktown, Johannesburg, South Africa, 2193						
Address for electronic communications	Jason.huang@wits.ac.za						

Client: Witness: Contractor: Witness:





10.1	The <i>Supervisor</i> is		
	Name	[•]	
	Address for communications	[•]	
	Address for electronic communications	[•]	
11.2(16)	The Scope is in	Part 3: Scope of Work and all documents and drawings to which it refers.	
11.2(18)	The Site Information is in	Part 4: Site Information and all documents and drawings to which it refers.	
11.2(17)	The <i>boundaries of the site</i> are	University of the Witwatersrand Precincts	
13.1	The <i>language of this contract</i> is	English	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.3	The <i>period for reply</i> is	2 weeks	
15.2	The following matters will be included in the Early Warning Register		
	1. [Any other concerns pertinent to the Package Order]		
15.2	Early warning meetings are to be held at intervals no longer than	7 calendar days	

2. The Contractor's main responsibilities

If the *Client* has identified work which is set to meet a stated *condition* by a *key date*

25.3	The <i>key dates</i> and <i>conditions</i> to be met are:		
	<i>condition</i> to be met	<i>key date</i>	
(1)	[•]	[•]	
(2)	[•]	[•]	
(3)	[•]	[•]	





3 Time

31.2 The *starting date* is 1 October 2026

30.1 The *access dates* are:

part of the Site

date

(1) The whole Site

[●]

32.2 The *Contractor* submits revised programmes at intervals no longer than

30 calendar days

If the *Client* has decided the *completion date* for the whole of the *works*

11.2(2) & 11.2(3) The *completion date* for the whole of the *works* is

30 June 2027

Taking over the *works* before the Completion Date The *Client* is **not** willing to take over the *works* before the completion Date.

If no programme is identified in part two of the Contract Data

31.1 The period after the Contract Date within which the *Contractor* is to submit a first programme for acceptance is

14 calendar days

Quality management

40.2 The period after the Contract Date within which the *Contractor* is to submit a quality policy statement and quality plan is

14 calendar days

43.1 The period between Completion of the whole of the *works* and the *defects date* is 52 weeks

44.2 The *defect correction period* is

2 Weeks

except that

- The *defect correction period* for

is

N/A

- The *defect correction period* for

is

N/A

Client: Witness: Contractor: Witness:





5 Payment

51.1	The <i>currency of the contract</i> is the	South African Rand
50.1	The <i>assessment interval</i> is	30 days
	The <i>interest rate</i> is	Prime lending rate of the <i>Client's</i> Bank.

If the period in which payments are made is not three weeks

51.2	The period within which payments are made is	30 Days
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6 Compensation events

60.1(13)	The place where weather is to be recorded is	WITS University Braamfontein and Parktown Campus Precincts, Johannesburg
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60.1(13)	The <i>weather measurements</i> to be recorded for each calendar month are - the cumulative rainfall (mm) - the number of days with rainfall more than 10 mm - the number of days with minimum air temperature less than 0 degrees Celsius - the number of days with snow lying at 09:00 hours South African Time and these measurements
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0

The <i>weather measurements</i> are supplied by	South African Weather Bureau
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If recorded weather data are available:

60.1(13)	The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at	Johannesburg Braamfontein weather station or nearest available
	and which are available from:	the South African Weather Bureau

If no recorded data are available

Where no recorded data are available	Assumed values for the ten-year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	Not applicable.
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If Option A or B is used

63.12 The *value engineering percentage* is 50%, unless another percentage is stated here, in which case it is

80%

60.6 The *method of measurement* is

Standard System of Measuring Building Work (seventh edition) Refer to the BoQ specification document for the model projects.

If there are additional compensation events

60.1(21) These are additional compensation events

None other than the standard definition as per the NEC.

7 Title

There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data

8 Liabilities and insurance

If there are additional *Client's* liabilities

80.1 These are additional *Client's* liabilities

None

83.3 Insurance Table row 3

The minimum amount of cover for insurance against loss of or damage to property (except the *works*, Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor* Providing the Works for any one event is:

R15 million in respect of each claim, without limit to the number of claims and R75 million in annual aggregate.

83.3 Insurance Table row 4

The minimum amount of cover for insurance against death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with the contract for any one event is:

That which is prescribed by the Compensation Injuries and Diseases Act No. 130 of 1993 as amended and whatever the *Contractor* deems desirable in addition.





If the *Client* is to provide Plant and Materials

83.3 Insurance Table row 1 The insurance against loss of or damage to the *works*, Plant and Materials is to include

cover for Plant and Materials provided by the *Client* for
an amount of

equal to the value of Plant
and Materials

If the *Client* is to provide any of the insurances stated in the Insurance Table

83.1 The *Client* provides these insurances from the Insurance Table

(1) Insurance against

Minimum amount of cover is

The deductibles are

(2) Insurance against

Minimum amount of cover is

The deductibles are

If additional insurances are to be provided

83.1 The *Client* provides these additional insurances

(1) Insurance against

Minimum amount of cover is

The deductibles are

Not applicable
Not applicable
Not applicable

83.2 The *Contractor* provides these additional insurances

(1) Insurance against

Minimum amount of cover is

The deductibles are

(2) Insurance against

The <i>Contractor</i> must insure itself against liability arising out of or due to its fault or the fault of any of its employees, agents, associates or other persons acting on its behalf. Such coverage must be on terms satisfactory to the University's Insurance Brokers. The <i>Contractor</i> must provide proof to the satisfaction of the University that such insurance cover has been taken out.
R30 million in respective of each claim, without limit to the number of claims and R 150 million in annual aggregate.
See policies arranged by the <i>Contractor</i>
Loss or damage to Equipment, <i>works</i> , Plant and Materials. This should include loss or damage to Plant and Materials which are outside of the working areas, and which are marked by the <i>Supervisor</i> for the Contract in accordance with the provisions of the Contract

Client: Witness: Contractor: Witness:





Minimum amount of cover is	The full replacement value of the Equipment, <i>works</i> , Plant and Materials.
The deductibles are	See policies arranged by the <i>Contractor</i>
(3) Insurance against	SASRIA (Special Risks)
Minimum amount of cover is	Total of the Prices (excluding VAT)
The deductibles are	See policies arranged by the <i>Contractor</i>
(4) Insurance for	Professional Indemnity
Minimum amount of cover is	R5 million in respect of each claim, without limit to the number of claims and R 25 million in annual aggregate.
The deductibles are	See policies arranged by the <i>Contractor</i>

Resolving and avoiding disputes

W1.4(1), W2.4(1) and
W3.3(1)

The *tribunal* is

Arbitration

W1.4(5), W2.4(4) and
W3.3(4)

The *arbitration procedure* is

the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.

The place where arbitration is
to be held is

Johannesburg, South Africa

The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the *arbitration procedure* does not state who selects an arbitrator, is

the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.

If Option W1 is used

W1.1(1)

The *Senior Representatives* of the *Client* are

Name (1)

Prof Ian Jandrell

Address for communications

University of the Witwatersrand, Johannesburg
1 Jan Smuts Avenue, Braamfontein, 2000

Address for electronic communications

ian.jandrell@wits.ac.za

W1.2

The *Adjudicator* is (Name)

**[It is always preferable to name the
Adjudicator at time of award. If this can**

the person selected from the ICE-SA Division (or
its successor body) of the South African
Institution of Civil Engineering Panel of





be done delete this data and insert the name and contact details below.]

Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za)

Address for communications

TBC

Address for electronic communications

TBC

The *Adjudicator nominating body* is:

the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body.

X1: Price adjustment for inflation (used only with Options A, B, C and D)

X1.1(c)

The proportions used to calculate the Price Adjustment Factor are

0.85	linked to the index for	Work Group 170, Mechanical services
0.0	linked to the index for	[•]
0.0	linked to the index for	[•]
0.0	linked to the index for	[•]
0.0	linked to the index for	[•]
0.15	non-adjustable	

1.00

The *base date* for indices is

1 July 2027

These indices are

Statistics South Africa, P0151.1, Construction Material Price Indices

X2: Changes in the law

There is no reference to Contract Data in this Option and terms in *italics* used in this Option are identified elsewhere in this Contract Data.





X5: Sectional Completion – only for selected Package Orders

11.2(3) The *completion date* for each *section* of the *works* is

<i>section</i>	<i>description</i>	<i>completion date</i>
(1)	[•]	[•]
(2)	[•]	[•]
(3)	[•]	[•]
(4)	[•]	[•]

X7: Delay damages

X7.1 Delay damages for Completion of the whole of the *works* are

0.1% of the Total of the Prices at the Contract Date per day late up to a maximum of 15% of the Total Prices at the Contract Date.

X11: Termination by the *Client* (applicable only for a specific Package Order)

There is no reference to Contract Data in this Option and terms in *italics* used in this Option are identified elsewhere in this Contract Data.

X14: Advanced payment to the *Contractor* for a specific Package Order

X14.1	The amount of the advanced payment is	Package order dependent at the Contract Date
X14.3	The period after the Contract date from which the <i>Contractor</i> repays the instalments in assessments is	[Package order dependent] weeks
X14.3	The instalments are	(either an amount or a percentage of the payment otherwise due)

Advanced payment bonds An advanced payment bond **is/is not** – required. (delete as applicable)





X15: The *Contractor's* design only for a specific Package Order and supported by an PI insurance

X15.4	The period for retention following Completion of the whole of the <i>works</i> or earlier termination is	As per the Package Order.
X15.5	The minimum amount of insurance cover for the claims made against the <i>Contractor</i> arising out of its failure to use the skill and care normally used by professionals designing works similar to the <i>works</i> is, in respect of each claim	As per the Package Order.
X15.5	The period following Completion of the whole of the <i>works</i> or earlier termination for which the <i>Contractor</i> maintains insurance for claims made against it arising out of its failure to use the skill and care is	As per the Package Order.

X16 Retention

X16.1	The <i>retention percentage</i> is	5 %
X16.2	The <i>retention period</i> is	12 months

X18: Limitation of liability

X18.2	The <i>Contractor's</i> liability to the <i>Client</i> for indirect or consequential loss is limited to:	Zero
X18.3	For any one event, the <i>Contractor's</i> liability to the <i>Client</i> for loss of or damage to the <i>Client's</i> property is limited to:	R 15 million
X18.4	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	R 15 million
X18.5	The <i>Contractor's</i> total liability to the <i>Client</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	R 75 million
X18.6	The <i>end of liability date</i> is 5 years after Completion of the whole of the <i>works</i>	

Client: Witness: Contractor: Witness:





Z: Additional conditions of contract

The *additional conditions of contract* are:

Z1 Relationship to the *Client's* Framework Contract

Z1.1 This contract is compiled in accordance with the provisions of the NEC4 Framework Contract agreed between the Parties on or about February 2027. References in this contract to the Framework Contract are to the aforesaid agreement.

Z2 Additional defined terms; add to clause 11.2

Z2.1 A Package is work identified by the *Client* in terms of the NEC4 Framework Contract to be carried out under this ECC4 contract. This contract uses contract data from the Framework Contract where that contract data is common to all work packages.

Z2.2 A Package Order is the *Project Manager's* instruction to carry out this ECC4 contract.

Z2.3 The term Package Order is used interchangeably with the term Work Order used in the NEC4 Framework Contract (FC4).

Z3 Appointments in terms of the Framework Contract

Z3.1 The assessment of a Package is in the form of a Package *bill of quantities*. Where items of work in the Package *bill of quantities* are covered by rates and prices in the Framework Contract Bill of Quantities, the items are priced using those rates and prices. The rates and prices for items in the Package *bill of quantities* which are not taken from the Framework Contract Bill of Quantities are assessed in the same way as a compensation event is assessed

Z3.2 The *Contractor* participates in early contractor involvement, in pro-active design and value engineering and constructability reviews, in consultation with the *Client* and its appointed professional consultancy teams in the preparation of this Package ECC4 based contract issued during the Framework Contract period.

Z3.3 This Framework Contract appointment is non-committal and there is no guarantee of any work Packages being allocated to any appointed framework contractor.

The *Client* may award work Packages outside of the Framework Contract at its discretion, under a standalone tender process.

Types of work packages excluded from allocation under the Framework Contract include maintenance work and any construction projects outside of the *Client's* Braamfontein and Parktown campus precincts.

The *Client* may allocate work Packages to the *Contractor* at its discretion. The allocation will be guided by considerations including but not limited to relevant experience, performance during past or ongoing work Packages on behalf of the *Client*, the *Contractor's* capacity, allocation of work within a specific precinct and balancing total value of work allocation to framework contractors.

Z3.4 A Package Order is not issued after the *end date* as per the framework contract.

Packages Orders issued before the *end date* may be completed after the *end date* as per the framework contract.

The issue of a Package is not a compensation event.

Client: Witness: Contractor: Witness:





Z4 Secondary Option X1 Price adjustment for inflation

Z4.1 Defined terms:

Z4.2 Each amount due includes an amount for price adjustment which is the sum of

- The change in the Price for Work Done to Date since the last assessment of the amount due multiplied by the PAF applicable at the previous July and
- The amount for price adjustment included in the previous amount due.

Z4.3 The defined Cost for compensation events is assessed using

The Defined Cost current at the dividing date used in assessing the compensation event adjusted to the *base date* by dividing by one plus the PAF applicable at the July before that dividing date, for other amounts

Z4.5 The base date for indices is 1 July 2027 (thereafter annually)

Z4.6 The indices are the index as published by Stats SA, P0151.1, Construction Material Price Indices, Work Group, 170.

Z5 Exchange Rate Fluctuation.

The imported material unit price, unless otherwise agreed between the Employer and the Contractor, is the Defined Cost of the imported material as delivered to the Contractor, based on an exchange rate obtained from the website www.xe.com/ict/ on a date stated in the Package Order and the prevailing market related rates, including the fee percentage.

The imported material unit price is recalculated based on the exchange rate obtained from the website www.xe.com/ict/ on a date within two weeks after the issuing of the package Order by the Employer or the Employer's Agent when the order is placed or at a date two weeks after the issuing of the package Order if an order is not placed with the foreign supplier.

A minimum exchange rate fluctuation of 5% will be deemed as the threshold to initiate a recalculation of the imported material unit price.

For the purposes of this tender indicative pricing to be based on an exchange rate of ZAR to USD 16.5:1





C1.3 Form of Surety

Pro Forma Securities: Advance payment bond

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Bond / Guarantee)

University of the Witwatersrand, Johannesburg

Private Bag 3, Wits 2050

Date: _____

Dear Sirs,

Advanced Payment Bond for Contract No.: _____

With reference to the above numbered contract made or to be made between

University of the Witwatersrand, Johannesburg

Private Bag 3, Wits 2050 (the *Employer*)

and

_____ (the *Contractor*),
for

The supply, delivery, installation, and commissioning HVAC systems for model within the university of the Witwatersrand precincts. (the works)

I/We the undersigned

on behalf of the Surety

of physical address

and duly authorised thereto do hereby bind ourselves as Surety and co-principal debtors in solidum for the due and proper repayment by the *Contractor* to the *Employer* of the advanced payment made by the *Employer* to the *Contractor* under the Contract, and for all losses and expenses that may be suffered or incurred by the *Employer* as a result of the *Contractor* not repaying the advanced payment, subject to the following conditions

1. The terms *Employer*, *Contractor*, and the *works* have the meaning as assigned to them by the *conditions of contract* listed in the Contract Data for the aforesaid Contract.
2. We renounce all benefits from the legal exceptions "Benefit of Exclusion and Division", "No value received" and all other exceptions which might or could be pleaded against the validity of this bond, with the meaning and effect of which exceptions we declare ourselves to be fully acquainted.
3. The *Employer* has the absolute right to arrange his affairs with the *Contractor* in any manner which the *Employer* deems fit and without being advised thereof the Surety shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the Surety. Without derogating from the foregoing compromise, extension of the construction period, indulgence, release or variation of the *Contractor's* obligation shall not affect the validity of this Advance Payment bond.

Client: Witness: Contractor: Witness:





4. This bond expires on the date when the Surety receives a notice from the *Employer's Representative* stating that the advanced payment has been repaid to the *Employer* in terms of the Contract or liquidated by deductions from other payments due to the *Contractor* through the *Contractor's* fulfilment of its other obligations under the Contract.
5. The amount of the bond shall be payable to the *Employer* upon the *Employer's* demand and no later than 7 days following the submission to the Surety of a certificate signed by the *Employer's Representative* stating the amount of the *Employer's* losses, damages and expenses incurred as a result of the non-performance aforesaid. The signed certificate shall be deemed to be conclusive proof of the extent of the *Employer's* loss, damage and expense.
6. Our total liability hereunder shall not exceed the sum of (R_____) which is equal to the advance payment.
7. This Advanced Payment Bond is neither negotiable nor transferable and is governed by the laws of the Republic of South Africa.

Signed at _____ on this _____ day of _____ 20____

Signature(s)

Name(s) (printed)

Position in Surety company

Signature of Witness(s)

Name(s) (printed)

Client: Witness: Contractor: Witness:





Contract Data Part 1: One-in-ten-year-return weather data

One-in-ten-year-return weather data obtained from the South African Weather Service (SAWS) for the Johannesburg (OR Tambo) weather station, representative of the project location (Braamfontein). The *weather measurements* to be recorded for each calendar month are:

1. the cumulative rainfall (mm);
2. the number of days with rainfall more than 10 mm;
3. the number of days with minimum air temperature less than 0 degrees Celsius; and
4. the number of days with snow at 08h00.

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

Month	No. of Days with Minimum Temperature below 0°C	No. of Days with Snow at 08:00	Total Monthly Rainfall (mm)
January	0	0	205.2
February	0	0	178.1
March	0	0	164.4
April	0	0	100.8
May	2	0	42.3
June	7	0	19.8
July	7	0	6.5
August	4	0	13.4
September	1	0	54.1
October	0	0	139.1
November	0	0	181.4
December	0	0	175.3

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





Part 2 – Data provided by the *Contractor*

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left-hand column for each statement however other clauses may also use the same data.
2. In the left-hand column where a note begins, "If ----" either complete the data and delete the note if the option applies or delete the note and the rows of data relevant to that note if the option has not been selected.]

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

1 General

10.1	The <i>Contractor</i> is	
	Name	[•]
	Address for communications	[•]
	Address for electronic communications	[•]
11.2(10) & 52.1	The <i>fee percentage</i> is	[•] %
11.2(20) & 16.3	The <i>working areas</i> are the Site and	[•]
24.1	The <i>key persons</i> are	
	Name (1)	[•]
	Job	[•]
	Responsibilities	[•]
	Qualifications	[•]
	Experience	[•]
	Name (2)	[•]
	Job	[•]
	Responsibilities	[•]
	Qualifications	[•]
	Experience	[•]

Client: Witness: Contractor: Witness:





11.2(8)

The following matters will be included in the Early Warning Register:

[●]

2 The *Contractor's* main responsibilities

If the *Contractor* is to provide Scope for its design

11.2(16) and 21.1

The Scope provided by the *Contractor* for its design is in

S 300 *Contractor's design*

3 Time

If a programme is to be identified in the Contract Data

31.1

The programme identified in Contract Data is

[●] -

If the *Contractor* is to decide the *completion date* for the whole of the *works*

11.2(3)

The *completion date* for the whole of the *works*

[●] -

5 Payment

11.2(21)

The *activity schedule* is in

Not Applicable

The tendered total of the Prices is

[●] -





Resolving and avoiding disputes

If Option W1 or W2 is used

W1.1(1)

The Senior Representatives of the Contractor are

Name

[●]

Address for communications

[●]

Address for electronic
communications

[●]

Name (2)

[●]

Address for communications

[●]

Address for electronic
communications

[●]





Data for Short Schedule of Cost Components (only used with Options A or B)

11.2(28) and The *people rates* are
SSCC 11

Category of person	unit	rate
Project Manager	Month	
Electrician	Month	
Lead HVAC Technician	Month	
Health and Safety Officer	Month	

SSCC 21	The published list of Equipment is the edition current at the Contract Date of the list published by	[•]
	The percentage for adjustment for Equipment in the published list is	[•] % (State plus or minus)

SSCC 22 The rates for other Equipment are

Equipment	rate
[•]	[•]
[•]	[•]
[•]	[•]
[•]	[•]





C2.1 Pricing assumptions Option B

How work is priced and assessed for payment

Clause 11 in NEC4 Engineering and Construction Contract (ECC4) Option B states:

Identified and defined terms	11	
	11.2	(22) The Bill of Quantities is the <i>bill of quantities</i> unless later changed in accordance with these <i>conditions of contract</i>. (30) The Price for Work Done to Date is the total of - the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate and - a proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed. Completed work is work which is without notified Defects the correction of which will delay following work. (33) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

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

New priced items, where required, in the Package Order bill of quantities, for which there are no items in the Model Project bill of quantities, shall be priced at rates based on those in the Model Project bill of quantities.

Function of the Bill of Quantities

Clause 56.1 in Option B states, "Information in the Bill of Quantities is not Scope or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Bill, but in the Scope. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Scope". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

Guidance before pricing and measuring

Clients preparing tenders or contract documents, and tendering contractors are advised to consult page 85 of the "NEC4 User Guide, Preparing an Engineering and Construction Contract" before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

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

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

Client: Witness: Contractor: Witness:





Measurement and Payment

Symbols

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

[add or delete as required]

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





General Assumptions

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

Key notes on the *Contractor's* invoice:

The *Contractor* applies for payment with a SARS compliant tax invoice addressed to the *Client* including the following:

- Name and address of the *Contractor*
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Client's* VAT registration number: 4390128942;
- The total Price for Work Done to Date which the *Contractor* has completed;
- Other amounts to be paid to the *Contractor*;
- Less amounts to be paid by or retained from the *Contractor*;
- The change in the amount due since the previous payment being the invoiced amount - excluding VAT, the VAT and including VAT;
- The invoice shall refer to the Purchase Order Number (obtained from the *Client*)
- Purchase Order Specific statement to accompany the invoice.

The *Contractor* attaches the detail assessment of the amount due to each tax invoice showing the Price for Work Done to Date for each item in the Price List for work which has been completed.

As required and applicable for payment processing purposes, the *Contractor* registers on the *Client's* Vendor Database by the first assessment date by completing the relevant vendor registration forms and providing all the required information.

One hundred percent (100%) of the Prices for Services Provided to Date is retained in assessments of the amount due until the Contractor has registered on the Wits University Procurement Database.

Client: Witness: Contractor: Witness:





Tax invoices

The Contractor submits his valid tax invoice in accordance with the law with his application for payment.

Where the Contractor does not submit his valid tax invoice in accordance with the law within the time required the period within which payment is made in terms of clause 50.1, the period within which payment is made in terms of clause 51.1 and the time allowed in clause 51.2 is extended by the length of time from the date when the *Contractor* should have submitted the valid tax invoices to the date of submission.

Vendor Registration

The *Contractor* shall complete vendor registration forms before the first assessment date. Such forms shall, as relevant be accompanied by the following documents, where applicable:

- Company registration documents, share certificate and joint venture agreements
- Certified copies of the Identity Documents of directors / managing members
- Tax clearance certificate
- VAT registration certificate
- B-BBEE Certification and B-BBEE Rating Certificate
- Company letter head
- A cancelled cheque of stamped letter from the bank, verifying the banking details

The *Contractor* may be requested to complete the Independent Contractor and Personal Service Provider Questionnaire in order to determine whether or not the University is required to deduct PAYE.





C2.2 The Bill Of Quantities – Option B

Refer Annexure 1: Model Projects Bill of Quantities.





Part C3 Scope of Work for a specific Package Order

C3.1: The *Client's* Scope

(See Annexure 2 The Scope for the model project as a reference.)

S 100 Description of the *works*

S 105 Project Objectives	The Client's objective is to appoint a competent Heating, Ventilation, and Air Conditioning (HVAC) installation contractor for the Model Projects.
S 110 Description of the <i>works</i>	The <i>works</i> are the supply, delivery and installation of an HVAC systems for Model Projects consisting of but not limited to the following: a) Supply and delivery of all equipment and materials. b) Installation of the complete HVAC system. c) Testing and commissioning. d) Integration with the Building Management System (BMS), if applicable. e) Documentation and handover manuals. f) Training for user personnel. g) 12 months maintenance post-commissioning (or other specified warranty period). h) Associated electrical reticulation i) Associated Building Works

S 200 Constraints on how the *Contractor* Provides the Works

S 201 General constraints	The following are general constraints and restrictions on the <i>Contractor</i> for the duration of the contract. Additionally, see the listed and attached Annexures: 1. Annexure 4 - Specification for access to and performing works and services on a University Precinct 2. Annexure 5 - Generic Occupational Health and Safety Environmental Specification for Construction Contracts The annexures state the general standard <i>Client</i> constraints regarding access to working areas, security and identification of people, control of site personnel, health and safety, etc.
S 205 Radio Frequency Interference	Not Applicable
S 206 <i>Contractor's</i> Equipment on Site	Only diesel-operated vehicles, plants and equipment and generators are permitted on Site. A list of all <i>Contractor's</i> Equipment, vehicles and devices must be provided and readily available for distribution to the Client Security Services.
S 207 Available facilities and restrictions	During the construction phase, the <i>Contractor</i> maintains enough personnel on-Site to manage the contract. No accommodation is available for the <i>Contractor</i> , on-site.

Client: Witness: Contractor: Witness:





S 208 Working and none working times	<u>Working days</u> are: Monday – Friday 07h00-17h00, Saturday 07h00 – 13h00 <u>Non-working days</u> are: Sundays and Public Holidays. The <i>Project Manager's</i> permission is required, subject to such conditions as the <i>Client</i> may set, to work on these days. <u>Special non-working days</u> are: None The <i>Project Manager's</i> permission is required, subject to such conditions as the <i>Client</i> may set, to work on these days. <u>The year-end break</u>: The year-end break commences on: [N/A] The year-end break ends on: [N/A] The <i>Project Manager's</i> permission is required, subject to such conditions as the <i>Client</i> may set, to work during the year-end break. Any out of the ordinary working hours will be agreed upon with PM.
S 210 Confidentiality	The <i>Contractor</i> undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with providing the Works. No information regarding this project shall be published or disclosed without the prior written consent of the Client.
S 211 Publicity	The <i>Contractor</i> shall be permitted to disclose Completion Certificates, Client testimonials and installation descriptions for the purposes of marking and securing future business. All disclosures must comply with Annexure 7: Terms and Conditions
S 215 Security and protection of the Site	<i>Client</i> shall be responsible for the provision of security within the University precinct; however, the <i>Contractor</i> is responsible for the security of the <i>Contractor's</i> equipment on site prior to official handover
S 220 Security & identification of people	<i>Contractor</i> shall abide by the <i>client's</i> security and identification protocols when coming to site and for the duration of any works as per Annexure 4_Access to University Precincts. The <i>Contractor</i> shall keep a daily workers register that records all personnel that come in and out of site on a daily basis.
S 225 Protection of existing structures and services	The <i>Contractor</i> shall take reasonable care to avoid any damage to existing structures, installation and installed services from the site which the works are being executed.
S 230 Protection of the works	See Annexure 4 - Access to and performing works and services on the University precinct.
S 235 Cleanliness of roads	Access roads are to be kept clear of any obstruction associated with the works as far as is reasonably practicable

Client: Witness: Contractor: Witness:





S 240 Traffic management	The <i>Contractor</i> is to take reasonable care to avoid or limit as far as is reasonably practicable, obstruction to access roads. In cases where traffic obstructions cannot be avoided or limited further in terms of time and impact, prior notice is to be given a week ahead of time. Obstructions are to be scheduled during hours that reduce or eliminate impacts to the <i>Client's</i> core business. During the duration of the obstruction adequate signage and traffic control personnel are to be arranged.
S 245 Condition survey	The <i>Contractor</i> shall be required to perform conditional surveys prior to package order generation as part of early contractor engagements to assess the constructability of the proposed package order with a view to reduce project risk
S 250 Consideration of Others	<i>Contractor</i> shall give consideration to <i>Client's</i> core business and the need for continuity of service in the planning and execution of the scope.
S 255 Industrial relations	The <i>Contractor</i> shall comply with all requirements as per law
S 260 Control of works	<i>Contractor</i> shall maintain strict quality control of the works in line with the manufacturers guidelines, the <i>Contractor's</i> approved Quality Management System, industry norms and standards
S 265 Site cleanliness	<i>Contractor</i> shall ensure good housekeeping at all times when executing the scope of work as per the approved safety file
S 270 Waste materials	<i>Contractor</i> shall be responsible for the disposal of the waste generated during the execution of the scope in accordance with approved SHEQ files
S 275 Supplier Development Programme	Not Applicable
S 280 Empowerment	<i>Contractor</i> must ensure they maintain the same level of BBBEE rating that was achieved during contract award

S 300 *Contractor's* design

S 305 Design responsibility ECC21.1	The permanent parts of the works are to be designed by the Client. All temporary works, facilities, and equipment necessary to complete the works to be designed by the <i>Contractor</i> including but not limited to the following: 1) Shop Drawings – As per the applicable area of scope. – 2) all temporary protection structures, including the storing of exposed excavated material. 3) scaffolding. 4) temporary structural supports for structural concrete and steel elements. 5) propping that may be required to support structural slabs while heavy equipment is placed in position. 6) mortar, plaster, and concrete mixes 7) shuttering for normal rough and smooth concrete. 8) temporary plumbing. 9) temporary electrical services. temporary signage, temporary offices, toilets, committee rooms, etc.; support to notice boards
--	--

Client: Witness: Contractor: Witness:





S 310 Design submission procedures and acceptance criteria ECC 21.2 ECC X22.3(1) ECC X22.3(3)	The detailed equipment specifications, scaffolding arrangements, shop drawings, temporary electrical connections are to be submitted to the <i>Client's</i> dully authorised personnel for review and approval prior to implementation as part of project execution.
S 315 Design approvals from Others	The detailed equipment specifications, scaffolding arrangements, shop drawings, temporary electrical connections are to be submitted to the Client's dully authorised personnel for review and approval prior to implementation as part of project execution
S 320 <i>Client's</i> requirements ECC 21.2 ECC X22.3(3)	All <i>Contractor's</i> designs are be done so in terms of the applicable standards, specifications and requirements as set out in this contract documents and any other legal and statutory requirements.
S 325 Design co-ordination	As per Z3.2
S 330 Requirements of Others	As part of discussion prior to Package Order assignment the requirements of different stakeholders are to be discussed and incorporated into the package order.
S 325 Using the <i>Contractor's</i> design	The <i>Contractor's</i> design is to be used solely for purpose of executing the scope of works
S 340 <i>Client's</i> requirements for design of Equipment	All <i>Contractor's</i> designs are be done so in terms of the applicable standards, specifications and requirements as set out in this contract documents and any other legal and statutory requirements.

Client: Witness: Contractor: Witness:





S 400 Completion

S 405 Completion definition ECC 11.2(2)	A Package Order shall be considered complete when the works as defined in the package order have been executed, all systems commissioned and operational, required O&M training has been given to the <i>Client</i> and End Users, and the one-year maintenance and guarantee period has lapsed.
S 410 Sectional Completion definition ECC 11.2(2) ECC X5.1	Sectional Completion is defined as the construction, commissioning and operationalisation of a defined part of the works.
S 415 Training	Prior to project final handover, system operations and maintenance(O&M) training is to be given to Clients, End Users and Facility Management Staff.
S 420 Final clean	To be completed prior to handover to Client, End User and Facility Management.
S 425 Security	The <i>contractor</i> is responsible for the security of the construction site unless otherwise agreed in writing with the <i>Client</i> .
S 430 Correcting Defects	As per 43.1 and 43.2
S 435 Pre-Completion arrangements	Not Applicable
S 440 Use of the works ECC 35.2	The works are to be used for their <i>Client's</i> intended purpose post commissioning.

S 500 Programme

S 505 Programme requirements ECC 31.2 ECC 31.3	The <i>Contractor</i> is required to submit detailed package order specific implementation plan for the execution of each package order. The plan shall include but is not limited to: • The approach that the contractor will use to execute the package order works • Documentation required from the <i>Client</i> • A proposed project schedule with start and end dates as well as key milestones • Resource allocation • Shut down durations and dates • Any required interruption of thoroughfare via walkways and roads • Any required interruption of access to parking • Any lifting of equipment via use of a mobile crane or other means • General access requirements • How the contractor is to avoid unintended damages
S 510 Methodology statement	The <i>Contractor</i> shall put forward a detailed overarching methodology indicating how they intend to execute the package order scope of works

Client: Witness: Contractor: Witness:





S 515 Work of the <i>Client</i> and Others ECC 25.1 ECC 60.1(5)	The <i>Client</i> may make use of Professional Consultants and Minor Frameworks Contractors to execute the following: • HVAC related designs • Structural assessments and designs • Roof waterproofing • Roof Sheeting • Structural upgrades As part of preparations for package order execution
S 520 Information required	The <i>Contractor</i> is to make information requests via the designated <i>Project Manager</i>; such requests shall include but will not be limited to: • Existing site drawings such as layout drawings, electrical reticulation drawings, plumbing drawings... etc • Other works handover documentation • <i>Client's</i> core business schedules such exam season start dates, venue availability, major campus events that interrupt works...etc
S 525 Revised programme	The <i>Contractor</i> is expected to revise schedules on a 2-week basis to enable accurate planning and tracking of task order execution progress. The <i>Contractor</i> shall strive to adhere to the original timelines and when delays are experienced the <i>Contractor</i> is to make plans to recover any lost time.

S 600 Quality management

S 605 Quality management system ECC 40.1	The <i>Contractor</i> is to submit a Quality Management System (QMS) for review and approval by the <i>Client Service Manager</i>. The QMS shall cover as a minimum, but not limited to, the following areas: • Quality Policy and objectives • Management commitment • Documentation Control • Project process approach • Resource management • Performance evaluation • Resolution of nonconformities • Continuous improvement
S 610 Quality policy statement and quality plan	<i>Contractor</i> to submit Quality policy statement and quality plan to the <i>Clients</i> representative for review and approval
S 615 Samples	Not Applicable

Client: Witness: Contractor: Witness:





S 700 Tests and inspections

S 705 Tests and inspections ECC 41.1 ECC 41.2 ECC 42.1 ECC 60.1(16)	Refer to Annexure 2: Model Project Specification documents. All test and inspections are to be as per Annexure 2, test will include the below but are not limited to: Cold Commissioning Tests - Continuity checks - Polarity checks - System controls check - System protection tests Hot Commissioning Tests - System operational checks - System air balancing - Protection Functions Check - System running noise levels System Performance checks - Air flow and temperature control test - System performance during various environmental and use conditions All factory acceptance tests to be witnessed by the <i>Project Manager</i> and designated <i>Client's</i> personnel A formal commissioning report to be issued to the <i>Project Manager</i> for review and as part of the handover documents
S 710 Samples	Not Applicable
S 715 Management of tests & inspections and provision of samples	All commissioning tests and Factory Acceptance tests and the tests results are to be captured in report format, issued to the <i>Project Manager</i> for review and as part of the handover documents.
S 720 Covering up completed work	Completed works are to be covered up in such manner as to render them safe.
S 725 Supervisor's procedure for inspections and watching tests	The <i>Contractor</i> is to issue the commissioning report to the <i>Project Manager</i> for review. All factory acceptance tests are to be arranged at least two weeks in advance and are be witnessed by the <i>Project Manager</i> and designated <i>Client's</i> personnel





S 800 Management of the works

S 805 Project team – Others	The <i>Contractor</i> and the <i>Project Manager</i> use the requirements of the early warning processes described in core clause 15.2, to <u>in addition</u> manage the progress of the <i>service</i> inclusive of • reviewing the progress of the <i>Contractor</i> in achieving the objectives of the service, • allowing the <i>Contractor</i> to demonstrate from the current Accepted Plan its progress and planned activities for the coming 4 weeks, • acting as a combined management team by discussing reviewing and making decisions required in terms of the contract, and in doing so ○ cultivate a spirit of co-operation and mutual trust for the benefit of both Parties and all who attend and ○ attend to any other issues considered relevant by either Party and the <i>Project Manager</i>. Early warning meetings may be convened at either Party's premises on an alternating basis as agreed between the <i>Contractor</i> and the <i>Project Manager</i> or otherwise, all meetings are held at the <i>Client's</i> site office. The <i>Project Manager</i> chairs the meeting. Informal reviews or meetings may be held at the premises of either Party throughout the contract on a non-interference basis. These informal reviews require no additional preparation and are intended to support communication between the <i>Project Manager</i> and the <i>Contractor</i>. All attendees at early warning meetings and any other meeting carry their own expenses incurred in connection with such attendance.
S810 Communication system ECC 13.2	The primary form of communication will be via email between the designated <i>Project Manager</i> and <i>Contractors</i> Project Manager or Site Supervisor for any issues pertaining to the contact. The secondary form of communication will be the bi-weekly progress meetings of which formal communications will be supported by the meeting minutes. The primary form of communication will be via email between the designated <i>Client's</i> <i>Project Manager</i> and <i>Contractors</i> Project Manager or Site Supervisor for any issues that are Task Order related. Task order specific WhatsApp groups will also be set up to facilitate faster communications for site related issues. Additional meetings will be set up on an ad hoc basis to address specific task order related issues; these will be arranged by agreement between the <i>Project Manager</i> and the <i>Contractor</i>
S 815 Management procedures	
S 820 <i>Contractor's</i> application for payment ECC 50.2	The <i>Contractor</i> is to apply for payment of a package order as per C2.1.(Tax invoices) when the particular section of the works is complete in the form of submission of an invoice. The invoice is to be certified by the consulting engineer after which it will be processed by the <i>Project Manager</i> and forwarded for approval and payment by the <i>Client</i>.

Client: Witness: Contractor: Witness:





S 900 Working with the Client and Others

S 905 Sharing the Working Areas with Others ECC 25.1 ECC 60.1(5)	<i>Contractor</i> to perform the works in such a manner to reduce the impact on the <i>Clients</i> core business, this includes but is not limited to: • Requests for shutdowns to be made at least 7 days in advance and only proceed after approvals have been given by the project manager • Switching off power outside lecturing/event hours • Reduction of noise levels during lecturing hours Scheduling of restrictions to parking and/or access outside lecturing hours														
S 910 Co-operation ECC 25.1 ECC 60.1(5)	The <i>Contractor</i> shall be required to co-operate and co-ordinate with the following service providers and client agents: <table border="1"> <thead> <tr> <th>Nature of Co-operation</th><th>Job description</th></tr> </thead> <tbody> <tr> <td>Package order specific project management coordination of interfaces and activities</td><td><i>Project Manager</i></td></tr> <tr> <td>The plant designs and equipment specifications must be submitted for review and information to the <i>Client's</i> structural engineer</td><td>Structural Engineer</td></tr> <tr> <td>The <i>Contractor</i> is to work in line with the requirements and designs and codified by the <i>client's</i> engineer</td><td>Principal Mechanical Engineer</td></tr> <tr> <td>The <i>Contractor's</i> installation is to comply with the specifications as codified by the <i>Client's</i> electrical engineer</td><td>Electrical Engineer</td></tr> <tr> <td>Commissioning is to be undertaken in conjunction with the <i>Client's</i> maintenance staff. The <i>Client's</i> staff must be trained in all operation and maintenance requirements, with support from suitable operation and maintenance manuals as required. Interfaces with shared roof space (such as HVAC systems) will be coordinated through the <i>Client's</i> maintenance staff.</td><td><i>Client</i> representative</td></tr> <tr> <td>The contractor's handover documents (O&M Manuals, as build drawings, detailed system specifications and descriptions...etc) are to be submitted to the <i>Client's</i> configuration manager for assessment and approval prior to final payment</td><td><i>Client</i> representative</td></tr> </tbody> </table>	Nature of Co-operation	Job description	Package order specific project management coordination of interfaces and activities	<i>Project Manager</i>	The plant designs and equipment specifications must be submitted for review and information to the <i>Client's</i> structural engineer	Structural Engineer	The <i>Contractor</i> is to work in line with the requirements and designs and codified by the <i>client's</i> engineer	Principal Mechanical Engineer	The <i>Contractor's</i> installation is to comply with the specifications as codified by the <i>Client's</i> electrical engineer	Electrical Engineer	Commissioning is to be undertaken in conjunction with the <i>Client's</i> maintenance staff. The <i>Client's</i> staff must be trained in all operation and maintenance requirements, with support from suitable operation and maintenance manuals as required. Interfaces with shared roof space (such as HVAC systems) will be coordinated through the <i>Client's</i> maintenance staff.	<i>Client</i> representative	The contractor's handover documents (O&M Manuals, as build drawings, detailed system specifications and descriptions...etc) are to be submitted to the <i>Client's</i> configuration manager for assessment and approval prior to final payment	<i>Client</i> representative
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S 915 Co-ordination	See Item 910														
S 920 Authorities and utilities providers	City Power and Joburg Water														

Client: Witness: Contractor: Witness:





S 1000 Services and other things to be provided

S 1005 Services and other things provided by the <i>Contractor</i> for the use by the <i>Client, Project Manager, Supervisor</i> or Others ECC 25.2	See S 110
S 1010 Services and other things to be provided by the <i>Client</i> ECC 25.2	See S 515

S 1100 Health and safety

S 1105 Health and safety requirements ECC 27.4	The <i>Contractor</i> is to comply with the requirements OHS Act the approved Package Order specific health and safety file.
S 1110 Method statements	The <i>Contractor</i> is to submit proposed installation method statements, GA drawings and SLDs to the <i>Project Manager</i> for evaluation prior to plant installation
S 1115 Legal requirements	The <i>Contractor</i> is to comply with the requirements as listed in Annexure 5 - Generic Occupational Health and Safety Environmental Specification for Construction Contracts , the approved Package Order specific health and safety file, and all relevant legislation.
S 1120 Inspections	See S 705
S 1125 Deleterious and hazardous materials	<i>Contractor</i> shall handle all hazardous material such as oil and/or other chemicals in line with the approved Package Order safety file
S 1130 Pre-Construction Information	See S 520

S 2100 Advanced payment to the *Contractor*

S 2105 Form of the advanced payment bond	See Clause Z5
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S 2300 Retention (Option X16) (not used with Option F)

S 2305 Form of retention bond	The retention will be kept in the form of money due to the <i>Contractor</i> , which will be released at the end of the retention period.
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Client: Witness: Contractor: Witness:





S 2700 Client's work specifications and drawings

S 2705 Client's work specifications	Package Order Specific
S 2710 Drawings	Package Order Specific

No.	Drawing No.	Description
1	Package order Specific	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

Client: Witness: Contractor: Witness:





C3.2: Scope provided by the Contractor for its design

Contractor to describe: [●]

Part C4 Site Information for a specific Package Order

SI 105 Site location	University of the Witwatersrand Precincts
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SI 200 Reports and surveys

SI 205 Reports and surveys	Model Project Annexure 2: Model Projects Specification document.
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SI 300 Public information

SI 305 Public information	Model Project
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SI 400 Buried pipes, services and other objects

SI 405 Buried pipes, services and other objects	Model Project
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SI 500 Buildings, structures and other things adjacent to the Site

SI 505 Buildings, structures and other things adjacent to the Site	Model Project
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SI 600 Health and safety information





C5 – ANNEXURES

Annexure 1: The Model Projects Bill of Quantities

Annexure 2: The Model Projects Specifications document

Annexure 3: The Model Projects Drawings

Annexure 4: Access to and performing works and services on the University precinct

Annexure 5: Generic occupational health, safety and environmental specification for construction contracts

Client: Witness: Contractor: Witness:

