# PROVINCIAL ADMINISTRATION OF KWAZULU-NATAL DEPARTMENT OF PUBLIC WORKS



### **BILLS OF QUANTITIES**

with GCC for Construction Works - Second Edition 2010

### **CONTRACTUAL SECTION**

ONE VOLUME APPROACH

WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE

**Quantity Surveyor** 

Mr Z.F. Shabangu

Engineer/Principal Agent

Department of Public Works

Private Bag X 42	Private Bag X 42				
Ulundi	Ulundi				
Ulundi					
3838	3838				
035-874 3280 - Tel Number	035-874 3280 - Tel I	Number			
035-874 2519 - Fax Number	035-874 2519 - Fax	Number			
dayalan.soobramoney@kznworks.gov.za	zibonele.shabangu@kznworks.gov.za				
Employer:	Region:				
Head: Public Works	Regional Manager				
KZN Department of Public Works	KZN Department of	Public Works			
Private Bag X 9041	Private Bag X 42				
PIETERMARITZBURG	Ulundi				
3200	3838				
Tel Number: 033 - 8971300	Tel Number:	035-874 3349			
Fax Number: 033 - 8971399	Fax Number:	035-874 2519			
Tender Number: ZNTU 03997 W	Project Code:	071206/0001			
CIDB Grading: 3SQ or Higher	Document Date:	26 September 2023			
ECDP Number: N/A					
Contracting Party:					
CIDB Registration number:					
Central Suppliers Database Registration Number:					



THE CONTRACT



**C1 - AGREEMENT AND CONTRACT DATA** 



FORM OF OFFER AND ACCEPTANCE

## FORM OF OFFER AND ACCEPTANCE

Tender No - ZNTU 03997 W



WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE

## C.1.1 - FORM OF OFFER AND ACCEPTANCE

THE OFFER AND ACCEPTANCE FORM IS BOUND INTO <u>SECTION 1</u> (See end of Returnable Documents) OF THIS DOCUMENT AS PART OF THE RETURNABLE DOCUMENTS. ONCE A CONTRACT IS CONCLUDED WITH A SUCCESSFUL TENDERER, THIS PAGE WILL BE REPLACED WITH THE FILLED AND SIGNED OFFER AND SIGN ACCEPTANCE BY THE EMPLOYER AND IT WILL BECOME PART OF THE CONTRACT.

PLEASE SUBMIT THE OFFER AND ACCEPTANCE FORM WITH THE OTHER RETURNABLE DOCUMENTS.



C1.2 - CONTRACT DATA

#### C 1.2 CONTRACT DATA: with GCC for Construction Works - Second Edition 2010 CONTRACT DATA FOR: WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE Tender no: The General Conditions of Contract are the clauses contained in the General Conditions of Contract (2010) (Second Edition) published by the South African Institution of Civil Engineering. Copies of these conditions of contract may be obtained through most regional offices of the South African Institution of Civil Engineering, telephone number 011 805 5947 or by visiting their website at www.saice.org.za. CONTRACT SPECIFIC DATA The following contract specific data are applicable to this contract: CONTRACT VARIABLES This schedule contains all variables specific to this document and is divided into pre-tender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of this agreement. Spaces requiring information must be filled in, shown as 'not applicable' or deleted but not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross referenced to the applicable clause of the schedule. Key cross reference clauses are italicised in [] brackets. The Engineer/Principal Agent, in accordance with Clause 1.1.1.16, shall obtain the specific approval from the Employer before executing any of his functions according to the "Conditions under which Consultants are appointed", or in the event where an employee of the Employer represents the Employer, the relevant General Delegations applicable at the time of executing his/her duties as described in Clause 3.1.2. Part 1: CONTRACT DATA PROVIDED BY THE EMPLOYER: PRE-TENDER INFORMATION CONTRACTING AND OTHER PARTIES [1.1.1.15] Employer: Head: Public Works (KZN Department of Public Works: Province of KwaZulu-Natal) Postal address: Private Bag X 9041 PIETERMARITZBURG 3200 Fax: 033 - 8971300 Tel: 033 - 8971399 [1.2.1.2] Physical address: 191 Prince Alfred Street PIETERMARITZBURG 3200 [1.1.1.16] Employers Agent 1 Mr Z.F. Shabangu Agent's service: Quantity Surveyor Postal address: Private Bag X 42 Ulundi 3838 Fax: 035-874 2519 035-874 3280 Tel Employers Agent 2 Agent's service: Postal address: 0 0 Fax: 0 Employers Agent 3 Agent's service: Postal address: 0 0 Fax: 0 Tel: Employers Agent 4 Agent's service:

0	
Tel: 0 Fax: 0  Tender no: ZNTU 03997 W  Employers Agent 5	
Tender no: ZNTU 03997 W  [Employers Agent 5	
Employers Agent 5	
Agent's service:	
lo l	
Postal address:	
0	
Tel: insert 0 Fax: 0 Employers Agent 6	
0	
Agent's service:	
0	
Postal address:	
0 0	
. Tel: insert 0 Fax: 0	
Employers Agent 7	
Agent's service:	
Postal address:	
0	
0	
Tel: insert 0 Fax: 0	
Employers Agent 8	
Agent's service:	
O Agent's service.	
Postal address:	
PART 1: DATA PROVIDED BY THE EMPLOYER	
[1.1.1.13] Defects Liability Period	and the second s
The defects liability period is:  A time measured from the date of the Certificate of Completion.	
Defects Liability Period is 12 Months for the whole of the Works	
Latent Defect Period	
[5.16.3] The latent defect period is: 5 years after the Final Approval Certificate	
Documentation required before Commencement of the Works:  [5.3.1] The documentation required before commencement with the Works execution are;	
D. A. D. W. Lee and L. A. C. C. D. W. Market and Andrews	days after notice from the Employer
prior to the Commencement Date.	
[5.6] Initial Programme The Contractor shall deliver his programme of work within 10 calendar days after notice Commencement Date.	from the Employer, prior to the
[6.2] Guarantee The Contractor shall deliver his chosen Guarantee (security) for this Works within 14 ca Employer, prior to the Commencement Date.	lendar days after notice from the
[8.6] Insurance The Contractor shall deliver his insurance for the Works within 14 calendar days after no Commencement Date.	otice from the Employer, prior to the

	Cash flow by contractor		ractor shall deliver hi cement Date.	s Cash flow for the \	Vorks within 14 caler	ndar days after	notice fro	om the Employer	, prior to the
	Priced Bill of Quantity		tractor shall deliver hi cement Date.	s Priced Bill of Quar	itity within 14 calenda	ar days after no	tice from	the Employer, p	rior to the
	Programme	The Cor required	ntractor is required to to approve this within	submit his Program 7 days in terms of (	me of Works in terms Clause 5.6.3	of Clause 5.6	.1 and 5.3	3.1 and the Princ	ipal Agent is
	Other requirements								
[5.3.2]	The time to submit the documen	tation require	ed before commencer	nent with Works ex	ecution is: 14	calendar	days		
	Non-Working days								
[5.8.1]	Non-Working days Special non- working days		Sundays Ali Nationally Reco	ognized Public Hol	idays and the year e	end break			
[5.8.1]	First Year end break - commen Second Year end break - commen Third Year end break - commen Fourth Year end break - commen	ends on ences ends on nces ends on	18-Dec-23 2-Jan-24 17-Dec-24 7-Jan-25 N/A N/A N/A N/A						
[3.1.3]	Engineer/Principal Agent to on the Engineer shall obtain the are appointed, or in the ever executing his/her duties.	onsult with I	ount from the Employ	er before executing ployer represents t	any of his functions ne Employer, the rel	according to ti levant Genera	ne "Cond Delegat	itions under whic ions applicable :	ch Consultants at the time of
	Security			I- taken of oloups	E 2 1 and E 2 2				
[6.2.1]	The time to deliver the deed of				5,5.1 A/IG 5.5.2.				
[6.2.1]	Please see CONTRACT DATA  Commencement Date	- below to se	elect Guarantee Opiic	N s					
	Commencement date means t terms of the Form of Offer and	Acceptance.					ned copy	of the Offer and	Acceptance in
	The <u>Agreement comes into</u> The tenderer <u>receives one full</u>	effect on the y completed o	date when; original copy of this do	ocument, including	3 1				
	The agreement ("this docume 1. Agreement and Conditions 2. Form of Offer and Acceptar 3. Contract Data. 4. Scope of Works. 5. Site Information. 6. Drawings & documents refe	of Contract.							
Ť.	(See Form of Offer and Accep								
[5.3.1]	The contractor shall commend								
[5,4.1]	Possession of the site will be from the Employer of Site Har	e given withir ad Over where	n 10 calendar days aft e the contractor will re	ter the <b>contractor</b> h eceive one <u>fully sign</u>	as fulfilled the condition ad copy of the Form of	ons (4.3, 5.6, 6 of Offer and Ac	i.2, 8.6) a ceptance	nd received the from the emplo	yer.
[5.6.1]	The Contractor shall deliver h	is programme	of work within 10 ca	lendar days after no	tice from the Employe	er, prior to the	Commen	cement Date.	
[1.1.1.33]	CONTRACT DETAILS  Works description: Refer to	document C3	- Scope of Work.						
[1.1.1.30]	Site description: Refer to do								
1,,,,,,,,,,	Specific options that are appl						*****		
	Where so:					*****			
[6.10.6.2]	time to time, in ter	f interest owe ms of section	d <u>by</u> the <b>employer</b> , the 1(2) of the Prescribe	d Rate of Interest A	t, 1975 (Act No. 55 C	or 1975), wiii aj	ріу, апо		
	<b>(b)</b> in respect o 80(1)(b) of the Pul	finterest owe olic Finance N	d <u>to</u> the <b>employer</b> , th //anagement Act, 199	e interest rate as de 9 (Act No. 1 of 1999	termined by the Minis ), will apply	ster of Finance	, from tim	e to time, in tern	ns of section
	2) Lateral support insura-	nce to be effe	cted by the contracto	r:		Yes	Х	No	
	3) Payment will be made	for materials	and goods			Yes	Х	No	
			<del>.</del>			Yes		No X	
1	4) Dispute resolution by	ແເຊສແບກ				<u> </u>			

	5) Extended defects liability period applicable to the fo	ollowing elements:		Electrical, Mechanical and Civil work
[8.6.1.1.2]	The Value of material, supplied by the Employer, and not	included in the Contract Price, is:	R0.00	
[8.6.1.1.3]	The amount to cover Professional Fees, not included in the 30% of the Contract Price		e and loss to be	included in the insurance:
[8.6.1.3]	The limit for indemnity for liable insurance is:	Unlimited		]
[6.5.1.2.3]	The percentage allowance to cover overhead charges for	contractor and subcontractors, is:	33.30%	
[1.1.1.14]	Practical Completion Date  The Practical Completion date is: 5 Calender Months			
	For the works as a whole: The whole of the works shall be completed within:	and the year-end Bu	all be deemed to inc diders Annual Indus	lude all Non – Working Days, Special Non – Working Days try Holiday Periods).
[5.5.1] [5.13.1]	The date for <b>practical completion</b> shall be The penalty per calendar day shall be :	To be determined 0.04% of the Contract Price, round	ded to the near	est R10
	For the works in sections:  The date for practical completion from the commence Portion 1:	ement date and the penalty per caler	ndar day:	
[5.5.1] [5.13.1]	As per Tenderers Program  0.04% of the Contract Price, rounded to the nearest F Portion 2:	R10		
[5.5.1] [5.13.1]	As per Tenderers Program 0.04% of the Contract Price, rounded to the nearest I Portion 3:	710		
[5.5.1] [5.13.1]	N/A 0.04% of the Contract Price, rounded to the nearest in Portion 4:	R10		
[5.5.1] [5.13.1]	N/A 0.04% of the Contract Price, rounded to the nearest Portion 5:	R10		
[5.5.1] [5.13.1]	N/A 0.04% of the Contract Price, rounded to the nearest Portion 6:	R10		
[5.5.1] [5.13.1] [1.3.2]	N/A 0.04% of the Contract Price, rounded to the nearest The law applicable to this agreement shall be that of the	R10 ne: Republic of South Africa		
[6.10.1.5]	The percentage advance on materials not yet built into	the Permanent Works is:	80.00%	
[6.10.3]	Percentage retention on amounts due to contractor is	The Percentage retention is nil. selected by the Contractor on the PROVIDED BY THE CONTRACT		
		ontract Price		
[6.8.1]	Notwithstanding anything to the contrary contained in the exceeds 6 months and the contract exceeds R1,000,00	<u>10.00, be subject to a Contract Fince A</u>	agastrian i ao	, oii
[6.8.2] [6.8.3]	Clause 6.8.2 the last part of the sentence saying "cal must be replaced by "calculated according to the Cont 1 January 2013)" as published by Statistics South Afri by Statistic South Africa. Tenderers are advised that Manual, the Head: Public Works will not accept the su	ca. The Contract Price Adjustment Pr with reference to Clause 3.4.6 of the bmission by Tenderers of lists of addit	rovision (CPAP) Contract Price tional items."	will be subject to the most recently released indices Adjustment Provisions (CPAP) Indices Applications
[6.8.2] [6.8.3]	Where this contract is a Lump Sum contract, the cont the contract period equals or exceeds 6 calendar moi industrial buildings only.	ract will only be subject to Contract F nths. The applicable work group shall	Price Adjustmen I be WG 180 fo	t Provisions (CPAP)(Revised 1 January 2013) when or domestic buildings or WG 181 for commercial an
[5.14.5]	The following clause must be added to clause 5.14 [5.14.5.6] The employers agent shall sub-		ar months to the	principal agent.
[10.5] [10.5.3]	The determinations of disputes shall be by ARBITRAT  The number of Adjudication Board Members to be appreciate the last part of the clause with the following:	Cone	the Chairman,	or his nominee of the Association of Arbitrators."
[10.9.1]	Where CPAP is applicable, the contract sum will be Indices Application Manual as published by Statistics	adjusted in accordance with the Cont South Africa, dated 1 January 2013 a	tract Price Adjus nd any amendm	stment Provisions (CPAP) as set out in the CPAP nents thereto:
ŀ	Indiana, the same of the same	Page 4 of 9		

1) Glass etc. measured in specialist section Metalwork, will be adjusted in terms of the index for that work group unless specifically stated otherwise in the bills of quantities 2) In case of uninterruptible power supplies, elevators, escalators and hoists, generating sets, motor-alternator sets and intercommunication systems shall be adjusted in accordance with Work Group 170. 3) Further to clause 3.4.6 of the CPAP Indices Application Manual, the listing of additional items for exclusion by Tenderer's, will not be permitted. Alternative Indices: Not Applicable Details of changes made to the General Conditions of Contract for construction works (2010) Second Edition COMMENCEMENT DATE - means the actual date of Site Hand over that should not occur prior to the Tenderer receiving one fully signed copy of [1.1] [1.1.1.5] the Offer and Acceptance in terms of the Form of Offer and Acceptance. ABNORMAL CLIMATIC CONDITIONS - means conditions over and above what could reasonably be expected for the specific locality where the [5,12,2,2] Works are being executed and include inter alia exessive rain, heat, cold, wind and any other climatic condition that would not normally be experienced during the season that the Works are executed in that area. The South African Weather Service's (http://www.weathersa.co.za) 10 year average climatic conditions statistics would be what could be reasonably expected for the specific locality where the Works are executed. CONSTRUCTION GUARANTEE - means an on demand guarantee at call obtained by the contractor from an institution approved by the [6.2.1] employer in terms of the employer's construction guarantee form as selected in the Offer and Acceptance Form and the contract data. CONSTRUCTION PERIOD - means the period commencing on the commencement date and ending on the date of due completion date. This period will be deemed to commence on actual site hand over date to the contractor and end on the date of practical completion and shall include all annual industrial holiday periods, Sundays and public holidays. CORRUPT PRACTICE - means the offer, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. FINAL ACCOUNT - The document prepared by the principal agent, which reflects the contract value of the works at final approval or termination. FRAUDULENT PRACTICE - means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer and includes collusive practise among tenderers (prior to or after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition. INTEREST - the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be in terms of the legislation of the Republic of South Africa, and in particular: (a) in respect of interest owed by the employer, the interest rate as determined by the Minister of Justice and Constitutional Development from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and in respect of interest owed to the employer, the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply [1.1.1.16] ENGINEER/PRINCIPAL AGENT - means the person or entity appointed by the Employer and named in the Contract Data as the Engineer /Principal Agent to act as agent of the Employer. In the event of an Engineer/Principal Agent not being appointed, then all the duties and obligations of an Engineer/Principal Agent as detailed in the Contract shall be fulfilled by a representative of the Employer as named in the Contract Data. (Hereafter referred to as Engineer) GENERAL ITEMS - or preliminaries means items stipulated in the Pricing Data relating to general obligations, site services, facilities and/or items [1.1.1,21] that cover elements of the cost of the work which are not considered as proportional to the quantities of the Permanent Works. Add the following to the clause 4.4.1: "The Contract shall only use subcontractors who are duly registered with the CIDB and who has an ACTIVE [4.4.1] status at the time of submitting the tender" Refer to Offer and Acceptance form for the various options that the contractor may choose from in providing a form of Guarantee under [6.2.1] "GUARATEE OPTIONS". Replace "at the prime overdraft rate, as charged by the Contractor's Bank," with "...at the interest rate as determined by the Minister of Justice and [6.10.6.2] Constitutional Development from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975). Omit ",on all overdue payments from the date on which the same should have been paid..." and replace with " only after 30 calendar days from receiving written notice from the Contractor that the amount is overdue,.." SPECIAL CONDITIONS OF CONTRACT Omit clause 5.12.3 and add the following: [5.12.3] "5.12.3. If an extension of time is granted, the Contractor shall be paid such additional time-related General Items, including for special non-working days, if applicable as are appropriate regarding to any other compensation which may already have been granted in respect of the circumstances concerned. The reasons for extension of time that would invoke payment of time related General Items are inter alia; Failure to give possession of the site to the contractor. 5.12.3.1 Making good physical loss and repairing damage to the works where the contractor is not at risk. 5.12.3.2 5.12.3.3 Contract instructions not occasioned by default by the contractor. Failure to issue construction information timeously or the late issue of a contract instruction following a request from the contractor. 5.12.3.4 Late acceptance by the principal agent of a design undertaken by a selected subcontractor where the contractor's obligations have been met. 5.12.3.5 Suspension or cancellation termination invoked by a nominated or selected n/s subcontractor due to default by the employer or the principal agent. 5.12.3.6 5,12,3,7 Insolvency of a nominated subcontractor. 5.12.3.8 Opening up and testing of work and materials and goods where such work is according to in accordance with the contract documents. 5.12.3.10 The execution of additional work for which the quantity included in the bills of quantities is not sufficiently accurate. Late or failure to supply materials and goods for which the employer is responsible. 5.12.3.11 5.12.3.12 Suspension of the works." 15.14.5.11 Omit entire clause 5.14.5.1 Add the following new clause "5.16.4. Upon the issue of a Final Approval Certificate, unless otherwise provided in the Contract: [5.16,4] 5.16.4.1. The performance Guarantee (if any) shall be returned within 14 days to the guarantor in terms of Clause 7.

[6.2.2]

[6.2.3]

[9.3,2.2]

Replace the following "..it shall be deemed that the Contractor has selected a security of ten percent retention of the value of the Works." with "..it shall be deemed that the Contractor has selected a security of a bank or insurance guarantee of 5% of the value of the Works and a payment reduction of 5% of the value certified in the payment certificate excluding value added tax."

Add to clause 6.2.3 the following "The Contractor shall provide proof of paid-up premium payments to accompany his payment certificate as proof that his performance guarantee has not expired yet. The Contractor will not receive payment without proof of the validity of their performance Omit "without prejudice to the exercise of any lien the Contractor may have acquired over the Employer's property."

- Duties and functions of the Engineer requiring the specific approval of the Employer BEFORE execution of any part of these duties are as follows:
- Determinations of contractors claims for extension of time (revision of the contract completion date). All claims for extension of time shall be (a) submitted by the Engineer, together with the Engineer's recommendations, to the Employer for determination. Omit "Engineer" in clause 42.2 and
- Drawings, instructions or communications of any kind requiring variations of the works and involving EXTRA's shall NOT be given effect by the (b) Contractor UNTIL BOTH the "Official Variation Order" and the "Financial Request for Variation Order and Additional Funds" form, as issued by the Department of Public Works, have been approved and signed by the Employer.
- Insurance policies to be approved by the Employer within 21 days of the date of the Commencement of the Works. (c)
- Any notice of disagreement raised by the Contractor or written Dispute Notice given by the Contractor to the Engineer shall be submitted by the (d) Engineer, together with the Engineer's recommendations, to the Employer for determination.
- The issue of the certificate of practical completion, certificate of completion and the final approval certificate shall be signed and submitted by the (e) Engineer, to the Employer for final approval and signature. The certificates shall not be considered as officially issued until signed by the Employer.

#### MANAGING PROJECT DURATION

- The Contractor shall co-ordinate his programme with all other contractors whose work may precede or be executed simultaneously to his own. The Contractor will be called upon to plan and control the project using the Project Evaluation and Review Technique (PERT) or other approved Critical Path Method (CPM) network analysis of his events and activities and those of the dub-contractors in his employ and must co-ordinate his planning with any other contractor employed on the project. A fortnightly project control report will be expected from the Contractor in writing, evaluating any gains or delays against the critical path and he should allow for all costs involved in planning reviewing and updating the programme to the satisfaction of the Principal Agent against this item.
- Activity-and total float shall belong to the Employer. (b)
- The Contractor shall deliver his programme of work within 10 calendar days after notice from the Employer, prior to the Commencement Date. (c) It is a condition of this contact that, the contracter submit to the Engineer/principal agent a detailed CPM Programme which shall be to the approval of the Engineer/principal agent. In this regard tenderers are advised to consult with the Engineer/Principal Agent as to the format and requirements of the programme as no claim whatsoever will entertained should the programme fail to meet the requirements of the Engineer/Principal Agent. Failure to submit the programme within the stipulated time may result in the contractor being held in breach of contract.

The approved programme will form the basis of time management of the project and extension of time will not be guaranteed unless the Contractor has strictly complied with this provision.

The programme shall make allowance for rain and the number of rain days allowed within the critical path shall be on the provisions of the clause dealing with inclement weather and claiming for delays in performance in this bill.

Allowance for the above must be made under this item as no claims for failing to comply with this precondition will later be entertained.

#### INCLEMENT WEATHER AND CLAIMS FOR DELAYS IN PERFORMANCE

- The Contract Sum includes a monthly allowance of 3 working days inclement weather during which rainfall exceeds 10mm per day for months as indicated in the Scope of Works. These days shall be reflected on the critical path of the Contractor's programme as specified in MANAGING PROJECT DURATION above.
- Claims for delays in performance due to inclement weather shall be calculated separately for each calendar month and for the project as a whole. (b) Delays or gains to the critical path shall be reflected in all revisions of the programme. An extension of time will only be granted where the following conditions are met:

  - The criteria to be used for WORK stoppages shall be for safety hazards or poor quality of work.
    The Employer's site representative or the Employer's Principal Agent, if the site representative is not available shall be notified when the Contractor stops the work and (ii) intends to claim performance delays. The Employer representative shall inspect the situation together with the Contractor and give an immediate decision.
    - The stoppage claimed must cause a delay in the Completion Date of work. If the critical activities can proceed and a non-critical activity is delayed due to 1. inclement weather no claims for delay shall be granted.
    - No claims for stoppages less than 2(two) hours per day shall be considered. 2.
    - Claims granted for more than 2 (two) hours, but less than 10 (ten) hour (lunch included) day, shall be added together and expressed as full days. 3.
    - All claims shall be submitted in writing to the Principal Agent within one working day of the actual stoppage.
    - The total delay in performance granted to the Contractor expressed in days shall be added to the contractual Completion Date of each section of the Works. The contractual penalty clause shall only come into effect after this newly arrived date.
    - Total delays (in hours) will be rounded up or down to the nearest integer for the calculation of Working Days. The total hours (including lunch) per 6. Working Day shall be 10 unless otherwise indicated on the Contractor's programme.
    - Where the programmed delays for inclement weather exceed the actual delays incurred the Completion Date(s) will not be adjusted.
    - Where the project includes builder's holidays the programmed durations for inclement weather shall be adjusted pro-rate to the actual Working Days. 8.

				Months			Total
Descri	ption	Sept	Oct	Nov	Dec	Jan	Total
	·	Hours	Hours	Hours	Hours	Hours	Hours
Programmed	Rain days	0	30	30	15	15	90
Actual	Rain days	16	22	35	15	18	106
Difference		-16	8	-5	0	-3	-16
				Ect	imated Extension of	time - in working days	2

8 hrs/day\*

See point 5.2 in the Scope of Works for the specific days the tenderer must allow for in this contract.

l.			dec point of an into deepe of it of the operand any of the operand any of the operand and ope
Tender no:	ZNTU 039	997 W	Part 2: CONTRACT DATA PROVIDED BY THE CONTRACTOR:
	POST-TE	NDER INFO	RMATION
	Note:		ation for this section requires consultation with the Contractor. The Engineer/Principal Agent shall not pre-select any of the alternatives to the Contractor.
	1 CONTRA	CT DETAIL	
[1.1.1.9]	Contract	or Name:	

[1.2.1.2]	Postal address:				
	Tel no	_ Fax no	**************************************	***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Tax / VAT Registration No:	e-mail	[+h=44440][+++++++++++++++++++++++++++++++++	THE COLUMN	
	Physical address:				
[1.1.1,10]	The accepted contract price inclusive of tax is R:	***************************************	***************************************		
[,,,,,,,,,,			en e	**************************************	(1) 14 6 5 5 5 1 5 5 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
	[Amount in words]				
	Payment Of Preliminaries (Clause 6.7, 6.8, 6.10 and 6.11)				
-	The preliminaries amounts shall be paid in terms of:	*Alternative A	Yes		
		**Alternative B	N/A		anat Odaa ayabudlaa MAT
	* Assessed by the Engineer/Principal Agent as an amount prorated to the value of the Work du Preliminary amount, Contingencies and any CPAP.				
	** Calculated from the priced Bill of Quantity/Lump Sum document. The Contractor and the Engineering monthly charge and final disestablishment charge.	, -	_		
	If the Contractor and the Engineer/Principal Agent can not agree, within 10 W Engineer/Principal Agent shall make a division of the Preliminaries to be inco 10% of the General Items/Preliminaries amount shall not be varied	Vorking Days from the orporated in the valuat	Commencen lons for each	nent Date, on such a monthly payment co	a division then the ertificate as follows;
	15% of the General Items/Preliminaries shall only be varied in proportion	on of the Contract Price	to the Contract	Sum	
	75% of the General Items/Preliminaries shall be varied in proportion to	the revised Constructio	п Period comp	ared with the initial Co	enstruction Period.
	Adjustment of Preilminaries (Clause 6.7, 6.8, 6.10 and 6.11)				
Alternative A	For the adjustment of Preliminaries both the Contract Sum and the Contract Value (Including ta Sum(s) and any provision for Cost Price Adjustment Provisions:-	ax) shall exclude the amour	nt of Preliminarie:	s, all Contingency	
	- An amount which shall not be varied.				
	- An amount varied in proportion to the contract value as compared to the Contract Sum.				
	<ul> <li>An amount varied in proportion to the Construction Period as compared to the initial Construction adjustment of the Contract Value in terms of the agreement.</li> </ul>	ction Period (excluding revi	slons to the Cons	struction Period to which	the Contractor is not entitled) to
	The Contractor shall provide a breakdown of charges (incl∪ding tax) within 15 working days of				
<b>\</b>	If the Contractor and the Principal Agent cannot agree, within ten (10) Working Days from the Preliminaries to be incorporated in the valuations for each monthly payment certificate as follow		such a division ti	nen the Principal Agent s	shall make a division of the
	10% of the amount shall not be varied				
	15% varied in proportion of the Contract Value to the Contract Sum				
	75% varied in proportion to the revised Construction period compared with the	initial Construction Period			
	Sectional Completion : Subdivision of Preliminaries Costs				
	For the adjustment of preliminaries for sections of the work the value of fixed, value, and time information within fifteen (15) working days of taking possession of the site, failing which the c				
	The above shall apply equally for projects where sectional completion was not contemplated a between the client and the employer. The original priced categorised amounts for fixed, value	t tender stage but subsequ , and time related amounts	ently occurred of shall be prorated	on an adhoc basis during d to the value of each se	g construction of the works as agreed ection.
	When an extension of time has been granted in terms of the GCC and the preliminaries requir shall be utilised, where applicable and not the overall preliminary amounts.	e to be adjusted according	ly, the pertinent s	sectional (subdivided) ca	alegorised preliminaries amounts
	Where sectional completion is required in terms of the agreement, the Contractor shall provide Contractor fail to provide such information within the period stipulated the categorized amount				unts into sections. Should the
1				YES	yes / no
	or				
Alternative B	The Contractor shall within 15 working days of the date of possession of the site provide the F of Preliminaries amounts for the works as a whole, or per section where applicable, including a				]
	charges and for the use of construction equipment in terms of the programme.		•	NO	yes / no

The contractor is informed that only 2 DOCUMENTS				
Contract documents marked and annex	ed hereto:			
Priced Bills of Quantities:	Yes		No	
Lump Sum document: :	Yes		No	
Guarantee Options:				
Not applicable				
2.2 DESIGN BRIEF				
Not applicable				YES or NO
2.3 DRAWINGS	·			YES or NO
See list of drawings/Annexure	s attached to this document.			YES or NO
2.4 DESIGN PROCEDURES	5			YES or NO
Not applicable				
·				
Contract drawings: Other documents:	Ye	s	No[	(1)244 (1)
Waiver of the Contractors lien or right of co	ntinuing possession is required.	YES		
<b>GUARANTEE OPTION</b>				
The Tenderer agrees to provide a bank	or insurance guarantee in accordan ntee shall be for a sum equal to an a	mount stated in the Co	HILIACI Data.	
Guarantees submitted must be iss Act No 52 of 1998 or Short Term I pro-forma referred to above. No a	neurance Act No 53 of 1998) Or	by a pank duly regis	faled lit family of me non	e Act (Long Term Insur ks Act No 94 of 1990, o
(a) the tenderer accepts that in respect the Employer in terms of the applicable	t of contracts up to R1 million, a pay e conditions of contract.	ment reduction of 5% o	of the contact value will be a	applicable and will be reduc
(b) In respect of contracts above R1 m	Illion, the Tenderer offers to provide	security as indicated b	elow: select one option	
(I) cash deposit of 10 % of the Contrac	t Price			
(ii) bank or insurance Performance Gu (iii) cash deposit of 5% of the Contract (excluding VAT)	t Price and a payment reduction of 5	5% of the value certified		
(iv) bank or insurance guarantee of 59 payment certificate (excluding VAT)	% of the Contract Price and a payme	ent reduction of 5% of	the value certified in the	
NOTE: Where the Tenderer has not s or insurance guarantee of 5% of the v tax See GCC2010 clause 6.2.2 as ar	alue of the Works and a payment re	s above, the default ople eduction of 5% of the v	tion will be as if the Tendere alue certified in the payment	r has selected a security of certificate excluding value
3 SIGNATURES OF THE CONTRACTI	NG PARTIES			
Thus done and signed at		onof		20
			for and behalf of the Emp	loyer who by signature her
Name of signatory				- · ·

KZN Department of Public Works Effective Date:16 JANUARY 2023 Revision 9

Capacity of signatory	as Witness.
Thus done and signed at	onof
Name of signatory	for and behalf of the Contractor who by signature herec
Traine of Digitatory	



**C1.3 - FORM OF GUARANTEE** 

## C1.3 PERFORMANCE GUARANTEE -GCC FOR CONSTRUCTION WORKS (2nd Edition - 2010) Head: Public Works KZN Department of Public Works: Private Bag X 9041 **PIETERMARITZBURG** 3200 Sir, ON DEMAND PERFORMANCE GUARANTEE Tender Number ZNTU 03997 W Project Code 071206/0001 For use with the General Conditions of Contract for Construction Works, Second Edition, 2010. **GUARANTOR DETAILS AND DEFINITIONS** "Guarantor" means: Physical Address: 'Employer" means: The Provincial Administration of KwaZulu-Natal in its Department of Public Works 'Contractor" means: "Engineer" means: WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: "Works" means: REPLACE EXISTING PERIMETER SECURITY FENCE "Site" means: "Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties. "Contract Sum" means: The accepted amount inclusive of tax of: Amount in Words: 10% "Guaranteed Sum" means: The maximum aggregate amount of: Of Contract Sum Amount in Words: "Expiry Date" means:

#### CONTRACT DETAILS

Engineer Issues: Interim Payment Certificates, Final Payment Certificates and the Certificate Completion of the Works as defined in the Contract.

#### PERFORMANCE GUARANTEE

- 1 The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
- 3 The Guarantor hereby acknowledges that:
  - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
  - 3.2 its obligation under the Performance Guarantee is restricted to the payment of money.
- 4 Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
  - 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Engineer in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
  - 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
  - 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum Certified in 4.
- 5 Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
  - 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
  - 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
  - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/linal sequestration and/or the provisional liquidation court order.
- 6 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
- Where the Guarantor has made payments in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Payment Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 8 Payment by the Guarantor in terms of 4 or 5 shall be made with seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 9 Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.

- The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 11 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 12 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 13 This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
- Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Court Act No 32 of 1944, as amended, to this jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at		
Date		_
Guarantor's signatory (1)		A
Capacity	· 	-
Guarantor's signatory (2)		
Capacity		<del>-</del>
Witness signatory (1)		
Witness signatory (2)		



**PART C2 - PRICING DATA** 



C2.2 - Preliminaries for GCC for Construction works - 2nd Edition 2010

### BILL NO. 1 C2 .2 PRELIMINARY AND GENERAL

	NOTES	UNIT	QUANTITY	RATE	AMOUNT
	The agreement is to be the General Conditions of Contract for Works of Civil Engineering Construction (2010) (Second Edition), published by the S. A. Institution Of Civil Engineering.				
II)	The Preliminaries are to be the Construction and management requirements for works contracts - Part 1: General engineering and construction works (SANS 1921-1: 2004 Edition 1) prepared by Standards South Africa and shall be deemed to be incorporated herein.				
III)	Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary				
iv)	Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading.				
V)	Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable").				
vi)	Adjustment of the preliminaries: each item priced, is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time.				
Vis,	Time (T) related Preliminaries will only be adjusted for omissions or additions, issued by the Employer, or delays caused by the Employer, for which variation and extension of time has been granted. <b>See Contract Data</b> .	,			
	SECTION A: GENERAL CONDITIONS OF CONTRACT				
A1	General (clause 1)				
	F: V: T:	Item			
A2	Basis of Contract (clause 2)				
	F: V: T:	Item			
	Carried forward to collection			R	

•	,		QUANTITY	RATE	AMOUNT
		UNIT	QUANTITY		
3	Engineer (clause 3)	Item			
	F: V: T: T:				
Α4	Contractor's General Obligation (clause 4)  F:	Item			
<b>A</b> 5	Time and Related Matters (clause 5) - As referred to in the Contract Period shall be deemed to include Special Condition of Contract. The Contract Period shall be deemed to include Special Condition of Contract. The Contract Period shall be deemed to include Special Condition of Contract. The Contract Period shall be deemed to include Special Condition of Contract Period Special Contract Period Contract Period Contract Period Special Contract Period Special Contract Period Special Contract Period Special Contract Period	<b>^</b>			
	Annual Industry Holiday Periods.  F:	Iten	1		
<b>A6</b> (	Payment and Related Matters (clause 6)	Ite	m \		
	F: V: T:				
A7	Quality and Related Matters (clause 7)	lte	em		
	F: V: T:				
A8	Risk and Related Matters (clause 8)	lt	em		
	F: V: T:				
A9	Termination of Contract (clause 9) F:T:	1	tem		
	F:V				
A1	Claims and Disputes (clause 10)		ltem		
	F:				
		ļ			
		!			
	Carried forward to co	ollection			R

	,			Revision !
<del></del>		UNIT QUAN	NTITY RATE AMO	MOUNT
SE M/	ECTION B: SANS 1921-1:2004 (Edition 1): CONSTRUCTION AND ANAGEMENT REQUIREMENTS FOR WORKS CONTRACTS: PART 1			
Re	efer to the SCOPE OF WORK for detail requirements:			
Sc	cope			
F:	T:	ltem		
N	Normative references			
F	F: V: V: T:	Item		
	Definitions			
F	F: V: T: T:	Item		
	Requirements for construction and management			
	F:T:	ltem		
	General			
	F: T:	Item		l
	Responsibilities for design and construction F:	ltem		Á
B4.3	Planning, programme and method statements	ltem		
	F: V: T: T:	llen,		
B4.4	Quality assurance F:T:	Item	}	
	F:V:		,	
B4.5	Setting out	Item		
:	F:T:			
1	Financial	1		
A Committee	Carried forward to	collection		R

					Revision 9
		UNIT	QUANTITY	RATE	AMOUNT
	Management and disposal of water F:T:	ltem			
	Blasting F:T:	ltem			
B4.8	Works adjacent to services and structures  F:T:	ltem			
<b>B4.</b>	Management of the Works and site  F:T:	Item			
B4.10	Earthworks F: V: T:	Item			
B4.11	Testing F: V: T:	Item			
B4.12	Materials, samples and fabrication drawings  F:	Item			
B4.	Equipment F:T:	Item			
B4.14	Site establishment F:T:	Item			
B4.15	Survey control F:T:	Item	ו		
B4.16	Temporary works F:T:	lten	n		
	Carried forward to collection	on			R

,					Revision :	d :
		UNIT	QUANTITY	RATE	AMOUNT	
	kisting services	Item				
4.18 H	Health and safety	ltem				
F	-:T:V:V:					
 	Environmental requirements F:T:T:	Item	1			
B4.20	Alterations, additions, extensions and modifications to existing works  F:T:	   Iter	n			
B4.21	Inspection of adjoining structures, services, buildings and property  F:	lte	m			
B4.22	Attendance on nominated and selected subcontractors  F:	ļt:	em			
	SECTION C: SCOPE OF WORK in accordance with SANS 10403  (The reference to Clauses refer to Table B.1 of SANS 1921-1:2004)					
C1	Certification by recognised bodies - CLAUSE 4.4  F:	14	tem			
C2	Agrément certificates - CLAUSE 4.5		N/A			
	F: V: T:					
C3	Other services and facilities - CLAUSE 4.8  F:		item			-
	Carried forward to c	nllection			R	_

						(CVISION	1
	:		UNIT	QUANTITY	RATE	AMOUNT	
			11 - 122				
4	Recor	ding of weather - CLAUSE 5.2	Item				
	F:	V:V:					
C5	Mana	agement meetings - CLAUSE 5.3	Iten	1			
	·		lte	m			
C6	Dail	y records CLAUSE 5.6 					
C7	1	Laurantees - CLAUSE 5.7	lte	em			
	F:	V:V:V:					
C	8 P6	ermits - CLAUSE 5.9	\ \{\frac{1}{2}}	tem			
	1	ermits - CLAUSE 3.3	\ \ \ \ \	i.			!
	C9 P	roof of compliance with the law - CLAUSE 5.10 -:		Item			
		SECTION D: SPECIFICATION DATA ASSOCIATED WITH SANS 1921-1:	2004				
		/=-kla (1.1)					
The state of the s	D1	Requirements for drawings, information and calculations for which the contractor is responsible CLAUSE 4.1.7		Item			
		F: V: T:					
		The responsibility strategy assigned to the contractor for the works CLAL	JSE				
:	D2			Item			
		4.2.1 F: V: T:					
					L	R	
		Carried forward t	o colle	ction			

	,	•				Revisio	<u> </u>
			UNIT	QUANTITY	RATE	AMOUNT	
3	The p	olanning, programme and method statements - CLAUSE 4.3	Item				
Ì	F:	T:					
)4	Sam	ples of materials, workmanship and finishes - CLAUSE 4.12.1	Item				
	F:	T:					
)5	emi	rication drawings that the contractor is to provide and deliver to the ployer - CLAUSE 4.12.2	Item	ו			
	F:	V: V:					
D6 [	Off	fice for the foreman CLAUSE 4.14.3	Iter	n			
	F:.	T:V:V:					
D7	Те	lephone - CLAUSE 4.14.3 V: T:	lte	m			
	1						
D8	0	ffice for inspector of works - CLAUSE 4.14.3	lte	em			
D9	-	elephone in office for inspector of works - CLAUSE 4.14.3	   It	em			
D1	-	Sheds - CLAUSE 4.14.3 F:T:	1	tem			
D.	. 1	Provision and erection of signboards - CLAUSE 4.14.6		tem			
		F: V: T:					
D	12	Termination, diversion or maintenance of existing services - CLAUSE4.17.1	1	Item			
		F: T:					
	D13	Services which are known to exist - CLAUSE 4.17.3		Item			
		F: V: T: T:	Maction			R	
		Carried forward to co	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				

		UNIT	QUANTITY	RATE	AMOUNT
Dete	ection apparatus - CLAUSE 4.17.4	ltem			
F:	T:				
	ditional health and safety requirements - CLAUSE 4.18	Item			
  F:	T:				
<u>Se</u> <u>"N</u>	ECTION E: SPECIFIC PRELIMINARIES  oction E contains Specific Preliminary items which apply to this contract except where /A" (Not Applicable) appears against the item.  ROPRIETARY BRANDED PRODUCTS				
TI pr	he contractor shall take delivery of, handle, store, use apply and/or fix all representatives in strict accordance with the manufacturers authorised representative.	! !te	m		
F	:T:V:				
	OVERTIME  Should overtime be required to be worked for any reason whatsoever, the cost of such overtime are to be borne by the Contractor unless the Engineer/Princip Agent has specifically authorised in writing, prior to the execution thereof, the costs for such overtime are to be borne by the Employer.	sts pai nat			
ì	F: V: T: T:	1	em		
E3	AS BUILT DRAWINGS	ours			
	The position of construction breaks and the extent of individual concrete position are to be recorded by the Contractor on the Structural Engineer's drawings are to be submitted to the Engineer/Principal Agent and the Structural Engineer their records.  F:	and neer	Item .		
	Carried forward to col	lection			R

SECTION E: SPECIFIC PRELIMINARIES	UNIT	QUANTITY	RATE	AMOUNT
SITE INSTRUCTIONS				
Site Instructions issued on site are to be recorded in triplicate in a Site Instruction book which is to be maintained on site by the Contractor.  F:	Item			
LABOUR RECORD				
At the end of each week the Contractor shall provide the Engineer/Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all sub-contractors on the works each day.    F:	al lten			
				R
Carried forward to colle	ection			

When it is required that the contract be executed in sections or portions, the tenderer shall allow for all costs in this regard as no claim for additional costs will be entertained.    Emancial costs in this regard as no claim for additional costs will be entertained.			UNIT	QUANTITY	RATE	AMOUNT	
Tenderers are to allow in their tenders and pay the ordinary levy imposed on imported items in terms of item 196.10 of Part 8 of Schedule No. 1 of the Customs and Excise Act, 1964 with effect from 1 October 1989.    Contract Price Adjustment Provisions (CPAP)    Notwithstanding anything to the contrary contained in the GCC for Construction Works 2010 2nd Edition, this Contract shall only when the Construction Period Works 2010 2nd Edition, this Contract sum exceeds R1,000,000,00 be subject to exceeds 6 months and the Contract sum exceeds R1,000,000,00 be subject to exceeds 6 months and the Contract sum exceeds Application Manual for use the Contract Price Adjustment Provisions Indices Application Manual for use with P0151 indices (CPAP) (Revised 1 January 2013) as published by Statistics with P0151 indices (CPAP) (Revised 1 January 2013) as published by Statistics with Po151 indices (CPAP) Indices Applications Manual, the Contract Price Adjustment Provisions (CPAP) Indices Applications Manual, the Head: Public Works will not accept the submission by Tenderers of lists of	E9	When it is required that the contract be executed in sections or portions, the tenderer shall allow for all costs in this regard as no claim for additional costs will be entertained.  F:	Item		RATE	AMOUNT	
		Tenderers are to allow in their tenders and pay the ordinary levy imposed imported items in terms of item 196.10 of Part 8 of Schedule No. 1 of the Customs and Excise Act, 1964 with effect from 1 October 1989.  F:	etion eriod ct to use estics f the	iem			
Carried forward to collection R		Corried forward to co	llection			R	_

E12.1 c Labour rate and paymont intervals The contractor should ensure that isbour rate paid to unskilled local isbour is commensurate to the daily task. When determining the rate, consideration should be given to that EPWP beneficiaries are mostly bread winners in their should be given to that EPWP beneficiaries are mostly bread winners in their should a size or created and person days of work. Contractors should make endeavours to ensure that isbourers, particularly consideration that the labour rate promotes creation of expanded number of jobs created and person days of work. Contractors should make endeavours to ensure that isbourers, particularly consideration to intervent of the location of the respect of the following the project is implemented in unfamilied and intervent of the location of the project, i.e. for projects implemented in unfamilied.  Fig. V. T.					Revision	i
The contractor should ensure that labour late have the commensurate to the daily task. When determining the rate, consideration commensurate to the daily task. When determining the rate, consideration that the labour rate prometers are mostly bread winners in their should be given to that EPWP beneficiaries are mostly bread winners in their stemilies, as the program intends alleviating poverty. There should also be consideration that the labour rate prometers creation of expanded number of jobs consideration that the labour rate prometers on fortright basis and prior notification be made should there be a shortfall on their wages.  The labour rate for local unskilled shall also be determined in consideration of the location of the project, i.e. for projects implemented in urbanized municipalities will not be the same as that for rural municipalities.  P:		UNIT	QUANTITY	RATE	AMOUNT	[ ]
The contractor should ensure that labour late provides to the day task. When determining the rate, consideration commensurate to the day task. When determining the rate, consideration commensurate to that EPWP beneficiaries are mostly bread wheners in their should be given to that EPWP beneficiaries are mostly bread wheners in their stemilies, as the program intends alteviating poverly. There should also be consideration that the labour rate promotos creation of expanded number of jobs consideration that the labour rate promotos oreation of expanded number of jobs consideration and the program when the promotos oreation of expanded numbers by a consideration of the project is on the projects implemented in urbanized municipalities will not be the same as that for rural municipalities.  P:		<del>                                     </del>				
	The contractor should ensure that labour rate plants to the daily task. When determining the rate, consideration should be given to that EPWP beneficiaries are mostly bread winners in their standlers, as the program intends alleviating poverty. There should also be consideration that the labour rate promotes creation of expanded number of jobs created and person days of work. Contractors should make endeavours to ensure that labourers, particularly unskilled are remunerated on fortnight basis and prior notification be made should there be a shortfall on their wages.  The labour rate for local unskilled shall also be determined in consideration of the project, i.e. for projects implemented in urbanized municipalities will not be the same as that for rural municipalities.  F:	f Iter	em		R	
	Carried forward to os					

	` · · · ·	UNIT	QUANTITY	RATE	AMOUNT	
1						
-	E12.3 RECORD KEEPING  12.3.1 Every employer must keep in the project site office the following minutes of site progress minutes; contractors' monthly site progress reports; accurately recorded attendance register; proof of payment as means to verify authenticity of data in the EPWP Beneficiary form submitted with payment certificates.  Copies of submitted EPWP beneficiary data forms should also be kept in the site office.  F:	ltem				
ţ	audits on projects conducted by National and Provincial Department audits on projects conducted by National and Provincial Department Department audits on projects conducted by National and Provincial Department Departme	lter	n			
	E12.4 EPWP REPORTING as per EPWP DATA FORM  At the end of each month as part of site progress report and to be attached to every contractors' progress payment certificate; the contractor shall provide the principal agent & Public Works with a written records, as per EPWP data form; which will be reflecting, beneficiaries full name & surname; ID No and job description of labour employed by main contractor and sub-contractors on site. At the end of each month the contractor must submit the following documents be attached to the Progress payment certificate:  1. EPWP monthly data collection form  2. Worker monthly payment upload  3. Worker monthly proof of payment i.e  3.1 Acknowledgement of receipt of payment or  3.2 Payslips  3.3 Bank statement highlighted the workers paid  4. Worker monthly training form  5. Monthly attendance register  6. Certified copies of ID's (once off)  7. ID size photos (once off)  8. Proof of UIF  9. Proof of COIDA  F:	to	tem		R	
7	Carried forward to col	lection			R	
			<del></del>			

				Revision
	UNIT	QUANTITY	RATE	AMOUNT
E12.5 EPWP PROMOTION  12.5.1 EPWP signage board  EPWP Program at the project level shall always be promoted through have the projects signage board that embrace EPWP logo at the bottom, correct measurement for this signage board will be provided by the project leader during the site handing over meeting. the standard "HELVETIVA MEDUIM" letters are to be used. Professional title to be 10 mm above line. Line thickness to be 8 mm thick. Space between bottom of the line and bottom of the lettering below the line has to be 100 mm. Letter sizes are as follows: Helvetica meduim 100 mm black upper case to be for project name and owner. Helvetica meduim 75mm black upper case only to be used for professional titles. Project name and	TIANU	QUANTITY	RAIL	AMOONI
owner shall be black lettering on white background.board sizes are as follows: Board to be minomum 2000mm from ground level and to be constructed from reinforced formed chromadek panels minimum 0,6mm thick chromadek. The contractor is responsible for ensuring that the project board remains neatly and safely erected for the full duration including maintenance period,after which the project board and post are to be dismantled and handed to the client in good order.  F:	Item			
12.5.2 Branding of labour apparel  Contractor & Sub-contractors' labourers shall be provided with EPWP branded Personal Protective Equipment (PPE), reflector vest with EPWP wording at the back is an ideal and cost effective means of promoting program on site.  The contractor is then advised to price for both item 17.5.1 and 17.5.2  F:	Iter	n		
E12.6 COMMUNITY LIAISON OFFICER (CLO)  UTILISATION OF A COMMUNITY LIAISON OFFICER  In addition to the requirements of Clause E9, contained in this document;  The Contractor shall allow for and pay any and all costs necessary for the engagement of the services of a Community Liaison Officer (CLO) for the full duration of this contract				
Contractor, a CLO may only manage one project at a given time.  A CLO will be identified by the local structures of the ward areas and appointed following fair and transparent interviewing process, to be conducted in the presence of local structures and the contractor representative, in order to assist the Contractor in the procurement of any local labour, etc. required for this project. The Contractor is to liaise with the CLO and afford him any assistance needed in ensuring sound working relations with the local community.	- 1			
Carried forward to collect	tion	<u> </u>	<u> </u>	R

	UNIT	QUANTITY	RATE	AMOUNT
Key Responsibilities of the CLO are envisaged to include and not necessary be limited to:  1. Assisting local leadership in conducting skills and resources audit which facilitates sourcing labour from within the ward or targeted areas for employment, as required by contractor.  2. Assisting in sourcing labour-only domestic sub-contractors and the				
procurement of materials from local resources, as required by the contractor.  3. Assisting the contractor by identifying areas of potential conflict and or threats to the project or to stakeholders in the project and recommend appropriate action to the contractor.  4. Assisting contractor and stakeholders in the project in the resolution of any conflict which may arise.  5. Establishing and ensuring that sufficient and open communication channels between the contractor and the work force are maintained.  6. Establish and ensuring that efficient and open communication channels between the contractor and the community are maintained.  7. Identifying and reporting to the Contractor regarding issues where communication between stakeholder is necessary, recommend courses of action and facilitate such communications  8. Assisting the Contractor and the work force in the establishment of grievance procedures and necessary recommenda-tion to the Contractor regarding the				
grievances and solution thereto.  9. Attending to site meetings and project implementation meetings as required by the Contractor and prepare periodic reports as may be required by the Contractor from time to time.  10. Attending to such other duties which are consistent with the functions of a CLO, as may be required by the Contractor from time to time.  Tenderers are to price twice the rate of unskilled local labour rate against this item for any and all costs arising out of compliance with the foregoing and in the event of a Tenderer failing to price against this item or making inadequate financial provision against this item for compliance as aforesaid, then no claim for costs or additional cost incurred will be entertained by the Head: Works  F:		ltem		
E12.7 SKILLS DEVELOPMENT ON SITE  Contractor in conforming to the object of EPWP that its beneficiaries need to be capacitated with skills that will render them employable in the future. It is then the responsibility of the Contractor that mandatory life skills are provided to 100% of workforce on site and on the job training to labourers from whom the potential for further development has been identified. The latter is not mandato to all as it covers technical skills.				R

			OLIA METETY	DATE	AMOUNT	
		UNIT	QUANTITY	RATE	AMOON	
loc pro	ntractor should also make provision for the possibility that there might be al youth that will need to be placed on the project with an intention to be ovided support towards improving their level of competency and productivity.					
to	entractor shall also provide all necessary on-the-job training to targeted labour enable such labour to master and advance on techniques required to dertake the work in accordance with requirements of the contract in a manner at does not compromise workers health and safety.					
F:	T:	Item				
l <sub>Ta</sub>	12.8 LABOUR ONLY Sub Contracting for local emerging enterprises enderer's are advised that this contract is subject to the Expanded Public Yorks Programme (EPWP) and the following criteria will apply:					
a u o p t b c s f	ndertaken by a Priority Population Group. This percentage excludes the costs of employing local unskilled labour. The allocation of this percentage from the roject, the screening of people, the selection of skills, will be for the Contractor of adjudicate.  The Priority Population Group consists of women, youth and disabled people.	lte	em			
					RI	
	Carried forward to collect	tion			'\	

						ĺ
		UNIT	QUANTITY	RATE	AMOUNT	1
th wi re c) ar	The Contractor will be responsible for ensuring that all materials for use by e PPG's in the works are to be on site timeously. The Contractor shall liaise th The Mentor and PPG to determine the nature and extent of materials quired and the lead time necessary.  The Contractor shall be responsible for the overall programming of the Works and he is to allow for monitoring the PPG's programme and progress.  In conjunction with the Mentor, he is to allow for the supervision and					
m st e a f)	ientoring (where necessary) of the PPG to ensure quality and adherence to randard building practice  The Contractor is to allow for extra storage facilities on site for the PPG's tools and equipment.  Basic tools shall be provided by the PPG's and where these are not available; the Contractor will supply him with the necessary tools and equipment and educt the costs thereof from the interim claims made by the PPG.					
c	) Work requiring specialized tools will be provided free of chargeby the Contractor with the provision that these be returned upon completion of the Work.					
-	CO-ORDINATION  The Contractor is to co-ordinate the work of all the PPG's, Sub-Contractors and Nominated Sub- Contractors appointed direct by the Employer in such a manne and at all times as will suit the building programme and he is to allow adequate access, for the PPG's, where required, to carry out their work in an efficient manner as no claims for extras in this connection will be entertained.	Iter	n			
/	F:T:V:T:					
	Where scaffolding is necessary for the use by any PPG and the Contractor has not erected any for his own use or has removed same after his own use, the Contractor shall supply sufficient scaffolding to the PPG to be erected and dismantled by the PPG and returned to the Contractor.					
l 					R	
	Carried forward to collect	lion				

							1
	T		UNIT	QUANTITY	RATE	AMOUNT	
	pro full	is attendance upon PPG's to execute the work is to include for the scaffolding ovisions as aforesaid and, in addition, is to include for co-operating to the lest extent with all the parties, attending on off-loading materials, providing itable storage for tools and materials used by the PPG's, use of general cilities such as latrines, etc., supply and cost of power, lighting, water and the			-		
	like	<del>o</del> .	Item	1			
	F:.	T:					
	It appropriate the property of	is compulsory that shortly after the contractor and or sub contractor has oppointed local labour, the employment contract should be signed by both carties, prior to commencement with works on site. The employment contract orms part of the Ministerial Determination or from the regional EPWP officials. ach contract will lapse at the end of each financial year therefore requiring the contractor to do a renewal of each contract should the need of employment still exist for that particular labourer.  E12.10 EPWP SCOPE of WORK  Note:  Contractors are to price any item on the Bill of Quantities having below, bearing an mind that they are regarded as main sources of job creation, whether subcontracted or undertaken by the main contractor.  Elements on the scope of work where application of Labour Intensive Construction methods as will indicated with letters (LI) are regarded feasible at as follows;  i) Excavating trenches for foundations and any other civil works with the depth not more than 1.5 m  ii) All masonry works which include concrete mixing on site; brickwork; plastering; screed works; jointing; etc.  iii) Painting, Plumbing, Ironmongery; roof cladding; glazing; tilling; carpentry; flooring; waterproofing; etc.  F:	re l	em		R	
$\vdash$		Carried forward to collec	lion			K]	
1							

		UNIT	QUANTITY	RATE	AMOUNT
lt w c b	lote: Is a general requirement of this contract that persons normally resident in the ward of the works (local labour) be given preference for employment on the ontract. Provided, however, that should adequate and appropriate labour not be available within the ward, others may be employed subject to satisfactory broof being provided that every reasonable endeavour has been made to	5,41	40.31111		
e V r f i c	Imploy local labour (Local Sub-contractor(s); Skilled; Semi-Skilled and Unskilled). The contractor shall in consultation with the local community leaders with the purpose of negotiating with them regarding the utilization of local esources in the construction process. In this regard, the contractor shall urthermore give preference, wherever possible to the employment of single needs of households, women and youth as well as families declared as most indigent by War on Poverty/ Sukuma Sakhe program profiling process. The contractor should aim, in general, to maximise the involvement of the local community, however workers from other communities should not exceed 20% of all persons working on the project, where local employees possess skills at level of competency that meet contractors requirements.				
	Payment for the labour-intensive component of the works Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.				
	Linkage of payment for labour-intensive component of works to submission of project data  The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.				
	Applicable labour laws  The current Ministerial Determination (also downloadable at <a href="www.epwp.gov.za">www.epwp.gov.za</a> )  Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.				
E13	F:	item			
	Carried forward to collection				R

		UNIT	QUANTITY	RATE	AMOUNT
E13.1	Provide and maintain a condom dispenser in terms of Clause 5.1a)				
	F:T:	Item			
	F:T:	ltem			
	inclusive of all direct and indirect costs;		i		
	Engage a qualified service provider as described in the scope of works to conduct an HIV Awareness Programme in terms of Clause 5.2.1a)		į		
	F: V: T:	ltem			
E13.4	Arrange for workers to attend the HIV Awareness Programme in terms of Clause 5.2.1b)			:	
	F:T:V:	ltem			
	Prepare and attach to claims for payment a brief report in terms of Clause 5.3 (see also HIV/STI Compliance Report included with this document).  F:	ltem		1	
	Note: In the event that the contractor fails to satisfy the requirements of this specification, the employer (Head: Public Works) may apply any of the sanctions provided for in the contract. Sanctions may include the application of a financial penalty of .04% of the Contract Sum per calendar day of which the required reports has not been submitted.		11		
E14	OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993  Tenderers are to allow for costs in providing a project specific ' Construction Phase Safety, Health and Environmental Plan' in accordance with "Section 2 - Specification Data associated with SANS 1921-1:2004" clause C4.18 in "Part C3 - Scope of Work"	ltem			
E15	NOTICE BOARD, SITE OFFICE, ETC.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		*	
L13	Tenderers are to allow for the provision and removal of a project notice board and a site office in accordance with the Principal Agent's requirements.			:	
	F: V: T:	Item			
E16	IMPORTED MATERIALS AND EQUIPMENT Where imported items are listed in the tender documents, the tenderer shall provide all information called for, failing which the price of any such item, material or equipment shall be excluded from currency fluctuations. (Refer to T2.14 - Schedule of Imported Materials and Equipment.			- Approximate the second secon	
	F: V: V: T: T:	Item			
	Carried forward to collection			-	₹

					Revision
		UNIT	QUANTITY	RATE	AMOUNT
E17	CONTRACT DOCUMENTS  The drawings issues with these Tender documents do not comprise the complete set but serves as a guide only for tendering purposes and for indicating the scope of works to enable the Tenderer to acquaint him with the nature and extent of the works and the manner in which they are to be executed.  Should any part of the drawings not be clearly legible to the Tenderer he shall,				
	before submitting his Tender, obtain clarification in writing from the principal agent.				
	F: V: V: T:	Item			
E18	GENERAL PREAMBLES The Document Preambles will be the "ASAQS Model Preambles for Trades – 2008" and is obtainable from the various Regional Office's of the Department of Public Works and shall be read in conjunction with the Bills of Quantities and be referred to for the full descriptions of work to be done and materials to be used.				
	F: V: T:	Item			
E19	TRADE NAMES Wherever a Trade Name for any product has been described in the Bills of Quantities the Tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the Principal Agent being obtained prior to the closing date for submission of Tenders.				
	F: V: T:	Item			
E20	EXISTING PREMISES OCCUPIED  Refer to Scope of Works Part C3 of this Tender Document for information on the occupation of existing buildings.				
,	F:T:	Item			
E21	INACCURATE AND DEFECTIVE WORK EXECUTED UNDER PREVIOUS CONTRACT				To the second se
	The contractor shall, after taking possession of the site and before commencing the work, check all levels, liners, profiles and the like and satisfy himself as to the dimensional accuracy of all work executed under the previous contract which may affect his work.		The state of the s	- Programme and the second sec	
	Should any inaccurate or defective work be found, the contractor shall immediately notify the principal agent in writing requesting his instructions with regard thereto and afford every facility to those rectifying such inaccurate or defective work.				
	F: V: V: T:	ltem			
	Carried forward to collection		, <del></del>	R	
· · · · · · · · · · · · · · · · · · ·	1	-			

		UNIT	QUANTITY	RATE	AMOUNT
	VIEWING THE SITE IN SECURITY AREAS				
	If the site is situated in a security area and the Tenderder must arrange with the Authorities to obtain permission to enter the site for Tenderding purposes.				
	F: V: T:	ltem			
E23	COMMENCEMENT OF WORKS IN SECURITY AREAS				
	If the works falls within a security area, the contractor must arrange with the Authorities and give the necessary notices before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account.				
	F: V: T:	Item			
:	ENTRANCE PERMITS TO SECURITY AREAS  If the works fall within a security area, the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under control of the Authority.  F:	ltem			
E25	SECURITY CHECK OF PERSONNEL  The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified.				
	In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works.				
	F: V: T: T:	Item			
,	PROHIBITION ON TAKING PHOTOGRAPHS In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking photographs, except when authorised thereto by or on behalf of the Minister.				
	The same prohibition is also applicable to all Correctional Institutions in terms of article 44.1(e) of the Correctional Services Act 8 of 1959.				
	F:T:	Item		L	
	Carried forward to collection			R	

				· · · · · · · · · · · · · · · · · · ·	Revision 9
		UNIT	QUANTITY	RATE	AMOUNT
E27	Management of Water  Construction purposes must be obtained from alternative water sources (i.e. supply other than water that is produced and distributed by a regulated water service authority from a licenced water treatment works for human consumption), eg dams, rivers, boreholes, springs, rainwater harvesting, recycled sewerage water, etc. The alternative water source shall not be of an inferior quality / standard than that required for construction purposes. The client reserves the rigfht through his agents to test such supplies or request certificates confirming the grade and nature of the water supply. Relevant knowledge of the respective area will be an advantage.				
		ANALYSIS IN THE STATE OF THE ST			
	Carried forward to collection		<u> </u>	<u>l</u>	
L		1			<u> </u>

<u>ollection</u>	MINARY & GENERAL	Page No.	An	nount
		1	R	
		2	R	
		3	R	
		4	R	
		5	R	
		6	R	
		7	R	
( )		8	R	
		9	R	
		10	R	
		11	R	
		12	R	
		13	R	
		14	R	
		15	R	
		16	R	
: )		17	R	
		18	R	
		19	R	·
		20	R	,
		21	R	
		22	R	
		23	R	
C	Carried forward to Final Summary		R	

Summary



**PART C2.3 BILL OF QUANTITIES** 



Section 02

C2.3 Bill Of Quantities

	C2 .3 Bill Of Quantities				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SECTION No. 02				
	BILL No.01				
	DEMOLITION (PROVISIONAL)				
	NOTE:			*1	
	The tenderer is reffered to the relevant clauses in the Model Preambles for trade (2008 Edition).				
	SUPPLEMENTARY PREAMBLE				
	View Site				
	Before submitting the tender, the contractor shall visit the site and satisfy himself with the nature and extent of of the work to be done and the value of materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of the Inferior or damaged material will be entertained.				
	General The contractor shall carry out the whole of the works with as little mess and noise as possible and with minimum of disturbance to adjoining premises and their tenants. He/she shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the engineer.				
	Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the engineer.				
	The contractor shall acknowledge that the sequencing of work will be necessary to ensure the safety of employees and state property, fencing to be done in phases.				
1	REMOVAL OF EXISTING WORK				
1.1	Removal of Fence				
	Remove 1800mm high welded mesh fence with all its attachments including the barbed wire, poles, concrete pole bases and re-erect as temporal fence 2000mm within the boundary line to make sure the site is always secure, the fence is to be desposed to the nearest dumping site once the site has been fully fenced with the new fence.	m	705		
1.2	Removal of Gates				
	Remove and cart away 5200mm x 1800mm away double vehicle gate Remove and cart away 1000mm x 1800 single pedestrian gate	No No	1		
1.3	Removal of Paving Lift and remove a interlocking concrete paving, bedding and cart away to the nearest dumping site, make good to the area after completing fence erection (PA to specify the paved area to be removed)	m²	30		
	Carried forward to summary-Page 01	<u> </u>		1	R

	WIMS 071206/0001		e. W/4	public wo	rks
	Department of Public Works - Nongoma District Office			Department: Public Works PROVINCE OF K	
	SECTION No. 02			PROVINCE OF K	WAZOCOMATAC
	BILL No. 02				
	EARTH WORKS (PROVISIONAL)		:		
	<u>NOTE:</u> ,				
	The tenderer is reffered to the relevant clauses in the Model Preambles for trade (2008 Edition)	1			
	SUPPLEMENTARY PREAMBLE				
	<u>View Site</u>			·	
	Before submitting the tender, the contractor shall visit the site and satisfy himself with the nature and extent of of the work to be done and the value of materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of the inferior or damaged material will be entertained.				
	SITE CLEARANCE				
1	Site Clearance				
1.1	Clear site, dig up and removal of rubbish, debris, vegitation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m²	705		
			1		
	·				
			1		
	Carried forward to summary-Page 02				R

	WIMS 071206/0001		- 1	public wo	rks
	Department of Public Works - Nongoma District Office			Department: Public Works PROVINCE OF K	
	SECTION No. 02		·		
	BILL No.03				
	EXTERNAL WORKS				
	NOTE: The tenderer is reffered to the relevant clauses in the Model Preambles for trade (2008 Edition)				
	SUPPLEMENTARY PREAMBLE	ļ			
	Boundary Lines				
	The Department shall be responsible for the initial location and exposure of all necessary boundary beacons and their indication to the Contractor at the site handover. The Contractor shall be responsible for subsequently ensuring that these beacons remain undisturbed and that the fencing is correctly aligned between boundary beacons. Should, during setting out of the further boundary beacons be uncovered or located and reasonable doubt arise regarding the correct alignment of fencing, then the Contractor shall be responsible for immediately notifying the Department, in writing, of such doubt, in order that the setting out may be checked and rectified, if necessary, new fwnce to be erected exactly where the old fence was.				
	Fencing				
	The fence shall be inaccordance to the manufactures specifications with all the necessary warranties, complaince certificates, coating certificates and to the clients satisfaction. The fence is to be installed in sections/phases to ensure that the site is secure at all times. The old fence is to be used as temporary fence until the new fence is fully erected. The fence is to be done according to the manufacturers specification by an approved installer with the necessary warranties, compliance certification (material and coating coc) and shop drawings				
1	FENCING& GATES				
1.1	<u>Fencing</u>				
1.1.1	Supply and Erect 2400mm high "Cochrane ClearVu" or similar approved perimeter fence comprising of 3305mm wide galvernized and polymetic 6000 coatedwelded mesh panels with panel aperture size (centres) shall be 76.2mm x 12.7mm, the panel shall be reinforced with 4 x 50mm deep V formation horizontal recessed bands (rigidity), shall have 2 x 70° flanges along sides, panel shall have 2 x 30° flanges along top and toe (intergrated rigid angle)and spikes to be installed, all fixtures shall be on the inside of the fence line, all panels to be fixed to 2400mm tapper locking posts and all posts to be embedded to a 25Mpa 400 x 400 x 600mm deep concrete base, and a 250x400mm concrete underdig/beam to run beneath all panels (between posts), fence to be installed complete including all other accessories in accordance to the manufacturers specification.	m	705		
	Carried forward to summary-Page 03				R

( )

	WIMS 071206/0001		- \@e.	public wo	rles
	Department of Public Works - Nongoma District Office			Department: Public Works	WAZULU-NATAL
1.2	GATES				·
1.2.1	Supply and install 5000mm long x 2400mm high slidding gate made of $100 \times 50 \times 3$ mm bottom rail, $75x50 \times 3$ ,0mm side , diagonal and top rail, to be filled with $40 \times 40 \times 3$ mm galvernised mild steel angle iron welded to mild steel surround and spaced equally not exceeding 150mm centres. The gate is to be installed complete including heavy duty GMS wheels with dust proof sealed roller bearings, $50 \times 50 \times 5$ mm GMS angle track with 16mm solid round bar welded ontop of angle iron, locking plates, closing channel, posts and concrete to bases for posts, fish tails to concrete and all other required accessories, gate is to be installed in accordance to the manufaturers specification.	No	2	•	
1.2.2	Supply and install 1000 x 2400mm high single gate including posts, the gate is to be hung on hinges and formed of 38 mm diameter x 2 mm wall thickness mild steel tubular framing all round with 38 mm diameter x 2 mm wall thickness mild steel horizontal centre rail. The gate shall be fitted with locking pad bolt with brass padlock, the gate shall be hung on mild steel tubular gate posts and to have spikes run across the entire length of the gate, all in accordance to the manufacturers specification.	No	1		
1.3	BOOM GATE				
1.3.1	Allow budgetary allowance of Forty Five Thousand Rands only (R45 000 ONLY) for the supply and complete installation of boom gate including all necessary accessories	Sum	1	R 45,000.00	R 45,000.00
					·
	Carried forward to summary-Page 04	1		<u> </u>	R

	Department of Public Works - Nongoma District Office			Public Wo Department: Public Works PROVINCE OF K	MAZULU-NATAI
	SUMMARY			THO THOSE OF IT	
1	C2.2 - Preliminaries for GCC for Construction works - 2nd Edition 2010	Summary			R
2	C2 .3 Bill Of Quantities	Summary	Page 1		R
		Summary	Page 2		R
		Summary	Page 3		R
		Summary	Page 4		R
			,		
				,	
	TOTAL TO FINAL SUMMARY				В
					R
	15% VAT				R



PART C3. SCOPE OF WORKS

C3.1 SCOPE OF WORKS
GCC FOR CONSTRUCTION WORKS (Edition 2 of 2010)

Scope of Works complied in accordance with SANS 10403 where reference is made to this part of SANS 1921-1:2004

Project title:

WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE

**EXISTING PERIMETER SECURITY FENCE** 

Tender no: ZNTU 03997 W Project Code: 071206/0001

### SECTION 1

### EXTENT OF THE WORKS

### 1.1 EMPLOYERS OBJECTIVES

Replace 705m of existing perimeter security fence at Department of Public Works - Nongoma District Offices.

### 1.2 OVERVIEW OF THE WORKS

Replace 705m of existing perimeter security fence at Department of Public Works - Nongoma District Offices.

### 1.3 EXTENT OF THE WORKS

Remove the existing fence, install new Clear View Fence (650 meters), install concrete ground beams (650) meters, install one new double gate (vehicles), 1 single (pedestrian) gate and an access boom.

### 1.4 LOCATION OF THE WORKS

The site is situated within the premises of Department of Public Works - Nongoma District Offices, the closest town is Nongoma.

### 1.5 TEMPORARY WORKS

All temporary work to comply with the Occupational Health and safety Act (Act 85 of 1993)

### 2 ENGINEERING

### 2.1 EMPLOYER'S DESIGN

Refer to fencing specifications in BoQ

### 2.2 DESIGN BRIEF

Not applicable

### 2.3 DRAWINGS

See list of drawings/Annexure's attached to this document.

### 2.4 DESIGN PROCEDURES

Not applicable

### PROCUREMENT

3

### 3.1 PREFERENTIAL PROCUREMENT PROCEDURES

This tender will be subject to the implementation of the Preferential Procurement Regulations, 2022, pertaining to the Preferential Procurement Policy Framework Act, Act Number 5 of 2000 and the relevant Supply Chain Management Legislation and the KwaZulu-Natal Supply Chain Management Policy Framework published by the KwaZulu-Natal Provincial Treasury. Tenderders are referred to www.kzntreasury.gov.za for access to the relevant documents

Tenderders are advised to familiarize themselves with the contents of the KwaZulu-Natal Supply Chain Management Policy Framework regarding Preference Point Systems, evaluation of tenders appeals and other matters.

### 3.2 RESOURCE STANDARD PERTAINING TO TARGETED PROCUREMENT

NOTE: This project will be adjudicated as not exceeding R 50,000 000,00

### 3.3 SCOPE OF MANDATORY SUBCONTRACT WORK

Not applicable

### 3.4 PREFERRED SUBCONTRACTORS/SUPPLIERS

Not applicable

### 3.5 SUBCONTRACTING PROCEDURES

Not applicable

### CONSTRUCTION

### 4.1 APPLICABLE SANS 2001 STANDARDS FOR CONSTRUCTION WORKS

The Contractor is referred to the "Model Preambles to Trades - 2008", any "Supplementary Preambles", the Electrical Specifications and Mechanical Specification for full descriptions of materials and methods referred to in these Bills of Quantities/Lump Sum documents, insofar as they apply. The Contractor is advised to study the "Standard Preambles to all Trades", any "Supplementary Preambles", the Electrical Specifications and Mechanical Specification, before pricing Bills of Quantities/Lump Sum documents.

Where the description in the Bills of Quantities/Lump Sum documents differ from those in the Standard Electrical Specifications, the descriptions in the Bills of Quantities/Lump Sum documents are to apply. No claim whatsoever will be allowed in respect of errors in pricing due to brevity of description of items in the Bills of Quantities/Lump Sum documents which are fully described when read in conjunction with the relevant Preambles and/or Specifications. Suppliers of materials and the like, whose quality systems apply with one or more of the SABS/SANS ISO 9000 Series should be used whenever possible in the absence of a particular SABS/SANS Specification Standard Mark.

Wherever the words "shall be deemed to be included in the description", "shall be stated" or other words having the same effect, appear in the Standard System, it shall be deemed that all descriptions in these Bills of Quantities/Lump Sum documents incorporated such inclusions and statements whether specifically stated or not.

The Contractor is hereby informed that where SABS/SANS Specifications are referred to in these Bills of Quantities/Lump Sums documents and Specifications thereto, then ONLY the Specification of Work Clauses will apply. The method of measurement and payment clauses will NOT apply to this Contract.

The Contractor is hereby informed that risk of collapse and keeping excavations free from water (excluding subterranean water) generally are deemed to be included in the descriptions unless accommodated in the system of measurement. Please refer to the Geotechnical Investigation report when included at the end of these tender documents.

Whenever reference is made to "Sub-Contractor", "Nominated Sub-Contractor" or the like in the specifications included or referred to in these Bills of Quantities/Lump Sums documents, it shall be deemed to mean "Contractor" as defined.

### 4.2 APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS

See above 4.1

### 4.3 PARTICULAR / GENERIC SPECIFICATIONS

The Contractor is referred to the following documents whether attached to this document or not:

### **SPECIFICATION**

Specification for HIV/AIDS Awareness (CIDB)

Specific Construction, Safety, Health and Environmental Plan

Model Preambles for Trades 2008

General Electrical Specification

Lightning Protection Installation

#### **PAGES**

HIV1 TO HIV3

1 to 49

E/1 to E/20

LP/1 to LP/6

### 4.4 CERTIFICATION BY RECOGNIZED BODIES

Only contractors registered with the Electrical Contracting Board of South Africa in accordance with the Regulations of the Occupational Health and Safety Act will be accepted and permitted to do work under this contract.

### 4.5 AGRÉMENT CERTIFICATES

Not applicable

### 4.6 PLANT AND MATERIAL PROVIDED BY THE EMPLOYER

Not applicable

### 4.7 SERVICES AND FACILITIES PROVIDED BY THE EMPLOYER

Not applicable

### 4.8 OTHER SERVICES AND FACILITIES

The Contractor shall provide any artificial lighting which may be necessary or required for the proper execution of the works, and provide electric power and water required by all Sub-Contractors, Nominated Sub-Contractors and Sub-Contractors appointed directly by the Administration.

The Contractor shall give all notices and pay all fees in connection with temporary electrical and water connections and shall connect temporary Electrical and Water meters for and pay for all current and water consumed.

The Contractor is advised that the permanent light fittings and water points of any kind installed in the Works are not to be used to provide temporary lighting and supplement water requirements for construction purposes.

### 5 MANAGEMENT

### 5.1 APPLICABLE SANS 1921 STANDARDS

Tenderders are referred to

SECTION 2: SPECIFICATION DATA ASSOCIATED WITH SANS 1921-1:2004 IN THIS DOCUMENT

### 5.2 RECORDING OF WEATHER

The Contractor shall keep record of abnormal climatic conditions to facilitate the adjudication of claims for extension of the contract period.

The Contractor shall allow in his programme for the following number of days for rain days (rain > 10mm per day) as per the table below:

CURRENT YEAR			YEAR + 1	YEAR + 2	
COKI			3	3	
January	w/days		3	3	
February	w/days			3	
March	w/days		3	3	
April	w/days		3	3	
Мау	w/days	8.8	3	3	
June	w/days		3 - page 1		
July	w/days	31.3			
August	w/days		3	<u> </u>	
September	w/days	5 6	3		
October	w/days		<u>3</u>		
November	w/days			in the second se	
December	w/days	3	3	<u> </u>	

#### MANAGEMENT MEETINGS 5.3

In order to facilitate the smooth functioning of the Works and to ensure the closest co-operation between all the parties concerned, the Employer will call for regular meetings to be held on the site, at which a senior member of the Contracting firm and the General Foreman of the Works will always be required to be present. In addition to the above, other persons will be required to attend these meetings as and when their presence is necessary, e.g., Consultants in all disciplines, representatives of the various Sub-Contractors, etc. Proper minutes of these meetings will be kept by the Employer\Principal Agent and copies will be circulated to all

persons attending the meetings and to others who need to be kept informed.

### FORMS FOR CONTRACT ADMINISTRATION 5.4

The Employer shall provide all necessary forms.

#### ELECTRONIC PAYMENTS 5.5

The Contractor shall provide all required information to the Employer to facilitate electronic payments upon request.

#### DAILY RECORDS 5.6

The Contractor shall keep daily records of people and equipment employed as well as a site diary in respect of

At the end of each week the Contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all Sub-Contractors on the works each day.

At the end of each week the Contractor shall provide the Principal Agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.

#### **BONDS AND GUARANTEES** 5.7

The Contractor shall within 10 calendar days after receiving notice from the Engineer and prior to receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data.

#### PAYMENT CERTIFICATES 5.8

Requirements will be in accordance with the Employers prescriptions.

### PERMITS 5.9 The Contractor is advised that, in the case of an existing building or institution, all security measures in force will remain in operation and he must acquaint himself and his Employees with them as he and his Employees will at The Contractor will on no account extend his operations beyond the confines of the building site as indicated by all times be subject to these measures. the Employer and must ensure that all his Employees are made aware of these limits. Any Employee disregarding this instruction and found outside the limit of the building site without authority, shall be redeployed immediately and shall not again be employed on this Contract. The Contractor will be responsible for ensuring that this instruction is strictly enforced and must provide and remove upon completion or when directed, such other necessary temporary barriers, fences, etc., as may be required and is to allow opposite this item for any charges he may wish to make in this connection. The Employer will accept no responsibility whatsoever for damage to or the loss of plant, materials, etc., from the site. PROOF OF COMPLIANCE WITH THE LAW 5.10 The following certificates must be provided before first delivery is taken: - HIV/STI Report (Bound into this document) **Electrical Compliance Certificate** Plumbing Compliance Certificate Lightning Certificate Soil Protection Certificate Concrete test and cube certificates Waterproofing Guarantee certificates TR1 and TR2 prefabricated roof truss certificates Soil compaction certificates Electrical and Mechanical test certificates Plumbing and drainage pressure test certificates Fire Compliance Certificate **Entomology Certificate** - SANS 10400-A:2010 compliance certificates - Latest National Building Regulation INSURANCE PROVIDED BY THE EMPLOYER 5.11 Not Applicable SECTION 2 SPECIFICATION DATA ASSOCIATED WITH SANS 1921-2004 4.1.7 The requirements for drawings, information and calculations for which the Contractor is responsible are: Clause Numbers Prefabricated roof trusses design must be submitted for approval 30 days prior to erections. 4.2.1 The responsibility strategy assigned to the Contractor for the works is: Strategy A 4.2.2 The structural engineer is: N/A 4.2.3 Drawings & other info are to be submitted in accordance with the contractors programme 4.3 The planning, programme and method statement are to comply with the following: N/A

### 4.12.1 Samples of materials

The work is to be executed with materials of the best specified and in the most substantial and workmanlike manner under the inspection of the Employer and to his satisfaction.

The Contractor shall furnish, without delay, such samples as called for or may be called for by the Employer, who may reject all materials or workmanship not corresponding with the approved sample.

The samples of materials, workmanship and finishes that the Contractor is to provide and deliver to the employer

- Fence sample

### 4.12.2 Fabrication drawings that the contractor is to provide to the employer are:

N/A

## 4.12.3 Office accommodation, equipment, accommodation for site meetings and other facilities for use by the employer and his agents are:

### OFFICE FOR FOREMAN

Provide, erect, maintain and remove at completion a suitable temporary office for the Contractor or his Foreman, perfectly secured, lighted and ventilated and having a desk with drawers.

### TELEPHONE

The Contractor shall provide a telephone on the site for the use of the Contractor and all Sub-Contractors for the duration of the Contract, and must make the necessary application for connection, give all notices and pay all fees, rentals and charges for the service and also for all calls.

### OFFICE FOR INSPECTOR OF WORKS

Provide, erect, maintain and remove at completion a well constructed temporary office for the Inspector of Works not less than 4 x 3 m on plan and 3 m high to eaves to the approval of the Employer. The office shall be constructed of wood framing covered externally with corrugated iron or corrugated asbestos and with a lean-to roof covered with the same material as the external wall covering. The office shall be lined internally with soft board or other approved material and a ceiling shall be provided of the same material as the internal lining. A suspended wood floor shall be provided and is to finish not less than 300 mm above the ground level. A lockable door and a window, which provides adequate light and ventilation, shall be fitted.

An office constructed of 115 mm thick brick-work and provided with a screeded concrete floor and roofed and ceiled as above described may be accepted as an alterative but prior permission of the Employer will be necessary before construction of such an office is commenced and his requirements shall be stated and fulfilled by the Contractor.

The office shall be fitted in an approved manner with a sloping topped desk of height and length suitable for the laying out and studying of drawings, a desk or table with not less than two lock-up drawers, shelves, seating and wash-stand, and the Contractor shall provide all necessary attendance.

### TELEPHONE IN OFFICE FOR INSPECTOR OF WORKS

The Contractor shall arrange for the installation of a lockable telephone in the Office for the Inspector of Works for the duration of the Contract. The Contractor will be required to make the necessary application for connection and give all notices on behalf of the Employer. The Employer will, however, be responsible for the direct payment of all fees, rentals and other charges by Telkom for the service for the Inspector of Works and for all calls made from this telephone.

SHED

Provide, erect, maintain and remove at completion, ample temporary sheds for the proper storage of materials and for the use of the workmen, and remove when no longer required.

## 4.14.6 The requirement for provision and erection of signboards are:

Supply, erect, maintain and remove at completion a painted notice board, size overall 2800 x 2345 mm high sign written to detail as Drawing No. T9506 which drawing is available from offices of the Department of Public Works. Only the official notice board is to be displayed on the site and no Sub-Contractor's boards will be permitted. The Contractor, at his own cost, may provide a board on which all sub-contract firms' names may be sign written. The notice board is to be to the approval of the Employer and is to be maintained in first class condition and placed where directed at the entrance to the site and remain there for the duration of the Contract.

## 4.17.1 Requirement for the termination, diversion or maintenance of existing services:

Should the Contractor come in contact with any underground cables or pipes during excavations, immediate notification must be made to the Employer and all work in the vicinity of such cables, pipes, etc., shall cease until authority to proceed has been obtained from the Employer. Should the Contractor damage underground cables or pipes resulting in a disruption of services to an existing institution such damage shall be repaired immediately.

### 4.17.3 Services which are known to exist on the site:

Investigate and provide detail drawings.

### 4.17.4 Requirement for detection apparatus

None

)

## 4.18 ADDITIONAL HEALTH AND SAFETY REQUIREMENTS ARE:

By the submission of a tender, any Tenderder will, if awarded the contract to which this tender document relates, be deemed to be the mandatory as envisaged by Section 37 (2) of the Act. As a mandatory the successful Tenderder will be deemed to be the "principal contractor" and an employer in his/her/their own right with duties as prescribed in the Act and accordingly will be deemed to have agreed to be solely responsible for ensuring that in connection with the service to which this tender document relates, all work will be performed and machinery and plant used in accordance with the Act. Should the Contractor, for whatever reason be unable to perform as required by the Act, the Contractor undertakes to inform the Employer accordingly.

Tenderders are advised that it is a Condition of this Tender that a 'Construction Phase Safety, Health and Environmental Plan' specifically relates to the project for which tenders are being submitted and must be prepared by the Tenderder and submitted with the other tender documents at the time of tender. Failure to do so Tenderders are therefore advised to study the 'Construction Safety, Health and Environmental Specification' which is issued as part of this tender document, the Model Preambles to Trades - 2008, any project Specification included in this tender document and any and all drawings which are referred to and issued as part of this tender document before preparing their own project specific 'Construction Phase Safety, Health and Environmental Plan'. Tenderders are also advised that such a plan which is submitted with a tender but is incomplete or considered inadequate by the Employer or his Representative will invalidate the tender.

The Contractor will be deemed to have satisfied himself with his obligations in terms of the Act and to have allowed for all costs arising from compliance with the Act as no claim for extra costs arising from compliance with, and obligations in terms of the Act will be entertained.

## 4.22 WORK BY NOMINATED AND SELECTED SUBCONTRACTORS COMPRISE:

[Provide list of applicable contractors]

### C3.2 - SPECIFICATION FOR HIV/AIDS AWARENESS

### 1 Scope

This generic specification contains requirements applicable to the reduction of the risk of transfer of the HIV virus between and among construction workers and the local community through the following four strategies:

- a) raising awareness about HIV/AIDS;
- b) providing construction workers with access to condoms;
- c) HIV counselling, testing and referral services; and
- d) Sexually Transmitted Infection diagnosis and treatment.

### 2 Normative references:

The following standard contains provisions that, through reference in this text, constitute provisions of this standard:

SANS 4074 ISO 4074, Condom Rubbers

### 3 Definitions and Abbreviations

#### 3.1 Definitions

Construction Worker: all persons in the employ of the contractor or in the employ of any of the subcontractors contracted by the contractor.

Local Community: the communities local to the site which are most likely to have contact with the construction worker and, in particular, sex workers in those communities.

Service provider: the natural or juristic person recognised by the South African Department of Health as specialist in conducting Aids Awareness Programmes.

### 3.2 Abbreviations

STI: Sexually transmitted infection

HIV: Human Immunodeficiency Virus

AIDS: Acquired Immune Deficiency Syndrome

### 4 Objectives

The objectives are to:

- a) reduce the risk of transfer of the HIV virus between and among construction workers and the local community;
- raise awareness amongst construction workers and the local community of the risk of infection with the HIV virus;
- c) promote early diagnosis; and
- d) assist affected individuals to access care and counselling.

### 5 Requirements

1

### 5.1 General requirement

The contractor shall, in order to satisfy the objectives stated in 4:

- a) make condoms complying with the requirements of SABS ISO 4074 available to all construction workers at readily accessible points on the site, suitably protected from the elements, for the duration of the contract:
- either place and maintain HIV/AIDS awareness posters of size of not less than A1 in areas which are highly trafficked by construction workers, or provide construction workers with a pamphlet, in languages largely understood by construction workers, which
- c) encourage voluntary HIV/STI testing;
- d) provide information concerning counselling, support and care of those that are infected services;
   and
- e) comply with the requirements of 5.2.

The provisions of 5.1 c) and d) do not apply to this contract.

#### 5.2 HIV awareness programme

- 5.2.1 The contractor shall:
  - a) engage a qualified service provider as described in the scope of works to conduct an HIV Awareness Programme which is structured to achieve the outcomes stated in 5.2.3 for contract workers as soon as a construction workers camp is established and populated or, where no such camp is established, within two weeks of the commencement of a significant portion of the works and at subsequent intervals, if any, provided for in the scope of works; and
  - arrange for, provide a suitable venue, and instruct all construction workers to attend the HIV Awareness Programme and notify the Employer's Representative of the date, time and venue whenever a session with construction workers is conducted.

Note: The National Department of Public Works maintains a list of qualified service providers.

- 5.2.2 The contractor shall do nothing to dissuade construction workers from attending such an HIV Awareness Programme and shall take all reasonable steps to ensure that a minimum of 90% of construction workers engaged in the works attend such a programme, when it is conducted.
- 5.2.3 The outcomes of the HIV Awareness Programme shall as a minimum, result in contract workers exposed to such a programme being able to:
  - a) communicate the existence of problems of HIV and be able to outline the consequences of transmission of HIV to or from the local community;
  - recall and communicate the mode of HIV transmission and preventative measures including the proper use of the condom.

The HIV/ Aids awareness programme described in 5.2 is to be repeated at four month intervals throughout the duration of the contract. (Four times in total, including the initial one at the start of the contract)

### 5.3 Reporting

- 5.3.1 The contractor shall prepare and attach to his claims for payment a brief report which outlines how the actions taken by the contractor in the period for which payment is claimed satisfy the requirements and a schedule which lists the names, identity numbers, trade / occupation and name of employer of all construction workers exposed to the programme (see HIV/STI Compliance Report).
- 5.3.2 The employer's representative shall certify the report and schedule described in 5.3.1 whenever a claim for payment is issued to the employer.

Note: In the event that the contractor falls to satisfy the requirements of this specification, the employer (Head: Public Works) may apply any of the sanctions provided for in the contract. Sanctions may include the application of a financial penalty of .04% of the Contract Sum.

The HIV /Aids awareness programme described in 5.2 shall in addition be conducted for the benefit of the local community on two occasions in the community centre nearest to the building site. The contractor shall be responsible for inviting identifiable community-based institutions and organisations, churches, and schools to participate in the programme.

C3.3 - HIV/STI COMPLIANCE REPORT		
Pro-forma reporting format in terms of the SPECIFICATION FOR HIV/AIDS AWARENESS		
Project Code:  Payment Claim number:  O71206/0001  Period covered by payment claim:		
Distribution of condoms (briefly describe where and how condoms are distributed).		
2. Posters / pamphlets (briefly describe where posters were placed / how pamphlets were distributed).		
	abbuild and the Parties	
	<del></del>	
	<u></u>	
3. Voluntary testing (briefly describe the actions taken / information provided to promote testing).		
4. Counselling, support and care (summarise information provided).		

5. HIV awareness programme (briefly describe action).

Name	<u>Identity</u> number	Trade / <u>occupation</u>	Name of <u>employer</u>		
			<u> </u>		
declare the abov	e to be a true reflection of acti	ons taken to ensure compliar	ice with the specification		
tractor:		Employer's representa	Employer's representative:		
		Name:			
re:		Signature:			

( )

Date:

Page 2 of 2

Date:



### **PART C4. SITE INFORMATION**

C4.1 SITE INFORMATION GCC FOR CONSTRUCTION WORKS (2 Edition of 2010)						
Project titl	Δ*	WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE				
Tender No	. ZNTU 03997 W	Project Code:	071206/0001			
C4.1	Site Information					
C4.1	GENERAL					
_ (a)	The existing fence constist of welded me posts, in poor condition	esh, flat wrap razor	wire at the top, and steal fencing			
(b)	Remove existing weldmesh fence, remove all fence poles, clear fenceline of all vegetation .5 meter wide. The removal of existing fence and replace with new fence should be done in ections not exceeding 100m at a time. The site must be secured at all times, the existing					
C4.2	GEOTECHNICAL INVESTIGATION REI	PORT				
(a)	None					



PART C5 - DRAWINGS / ANNEXURES

C5.1 - LIST OF DRAWINGS/ANNEXURES				
WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE				
Tender No.:	ZNTU 03997 W	Project Code:	071206/0001	
(Where drawings/annexure's are issued, document compilers must insert the following paragraph and list the applicable drawings/annexure's below.)				
tender document		e, drawings/anı	the Tender period to form part of the nexure's could be re-issued to the	
DRAWING NO		DESCRIPTION		
Specifications				
			···	

<u>ANNEXURES</u>	
Annexure 1	Model Preambles for Trades 2008
Annexure 2	General Electrical Specifications
Annexure 3	Lightning Protection Specifications
Annexure 4	Map of Tender submission location
Annexure 5	Joint Venture Agreement
Annexure 6	Health and Safety Specification
Annexure 7	Health and Safety Bill of Quantities
Annexure 8	Builders Lien Agreement
Annexure 9	Geotechnical Investigation Report (If applicable)
Annexure 10	EPWP Employment Contract
Annexure 11	Attendance Register - Infrastructure and Other projects
Annexure 12	EPWP Data Collection tool for Phase 3 system
Annexure 13	Project Specification - Electrical
Annexure 14	Supplementary Preambles - Electrical
Annexure 15	Drawings



### **ANNEXURES**

The Association of South African Quantity Surveyors Die Vereniging van Suid-Afrikaanse Bourekenaars



# MODEL PREAMBLES FOR TRADES 2008

forming part of the bills of quantities

Project: Replace Perimeter Fencing at Department of Public

Works - Nongoma District Office ZNTU 03997 W 
WIMS 071206/0001

Contract Reference Number:

## EXPLANATORY NOTES AND INSTRUCTIONS ON THE USE OF THESE MODEL PREAMBLES

#### 1. The document

- This document is published by and is available from the Association of South African Quantity Surveyors, P.O. Box 3527, Halfway House, 1685. Telephone (011) 315 4140. E-mail: administration@asaqs.co.za
- 1.2 The contents of this document are intended to cover workmanship and materials encountered in a significant majority of projects. If a material is not encountered in a significant majority of projects, its preamble will in all likelihood not be included in this document
- By its very nature, this document is a "Model" document and one that is designed to act as a basis upon which to build. It is anticipated that it will be supplemented by a "Supplementary Preambles" document included in the text of the bills of quantities that will include, *inter alia*, the following:
  - 1.3.1 supplementary clauses of a general nature that practitioners may deem necessary to cover their own individual requirements,
  - 1.3.2 additional clauses pertaining to specific materials incorporated in a project and not covered by the Model Preambles,
  - 1.3.3 amendments to anything contained in the Model Preambles. A clause has been incorporated in the "General" section of the document stipulating that anything contained in the "Supplementary Preambles" which is at variance to that which is contained in the Model Preambles, will take precedence over the Model Preambles and apply to the works in hand
- 1.4 It is intended that this document will be used by reference only in the text of the bills of quantities and will NOT be bound or reproduced therein

### 2. The basic philosophy

- 2.1 Wherever possible, reference has been made throughout the preambles to South African National Standards (SANS) to describe materials and methods respectively. It is therefore incumbent on the users of these preambles to have ready access to the relevant Specifications and Codes. Where such Specifications or Codes do not exist, suitable preambles have been compiled
- 2.2 These preambles have been designed to assist in abbreviating descriptions in the text of the bills of quantities and practitioners are encouraged to make use of this facility. e.g. The description of a stormwater catchpit would read:
  - "Brick stormwater catchpit size internally 600 x 400 x 1 200mm deep to invert fitted with and including a 450 x  $300mm \times 59kg$  cast iron grating and frame"
- 2.3 Wherever alternatives exist in respect of materials or workmanship, specific choices have been made in these preambles. Should users require different choices to specific items, these should be referred to in the Supplementary Preambles as outlined in clause 1.3

### 3. Additional notes in the use of these Model Preambles

### 3.1 Concrete, Formwork and Reinforcement

The Project Specification embodied in these preambles was compiled in collaboration with the Authors of SANS 1200G, which forms the basis for the Concrete, Formwork and Reinforcement model preambles

Users of these preambles are advised to submit a copy of the Model Preambles to the Engineers involved in a project for their scrutiny. Any amplifications, amendments, etc required by individual Engineers would then be incorporated in the Supplementary Preambles referred to in item 1.3

### 3.2 Roof Coverings

The roof coverings included in these Model Preambles are limited in their content and therefore any roofing material not included in these Preambles will need to have its full preamble included in the Supplementary Preambles

### 3.3 Structural Steelwork

The comments made under item 3.1 apply equally to Structural Steelwork

Note that the protective treatment of the structural steel covers only the treatment up to and including the primer (and patching after erection). The finishing coats of paint must be fully described and included either in the "Structural Steelwork" or in the "Paintwork" trade, as the practitioner wishes

# MODEL PREAMBLES FOR TRADES

# CONTENTS

REFERENCE	TRADE	PAGE
Α	General	2
В	Alterations	3
С	Earthworks	4
D	Concrete, Formwork and Reinforcement	6
Е	Precast Concrete	10
F	Masonry	11
G	Waterproofing	14
Н	Roof Coverings etc	15
1	Carpentry and Joinery	17
J	Ceilings, Partitions and Access Flooring	20
К	Floor Coverings, Wall Linings, etc	22
L	Ironmongery	23
М	Structural Steelwork	24
N	Metalwork	25
0	Plastering	29
Р	Tiling	31
Q	Plumbing and Drainage	32
R	Glazing	41
S	Paintwork	42
T	Paperhanging	44
U	External Works	45

# A. GENERAL

## A.1 APPLICATION OF CLAUSES

These Model Preambles for Trades, and any Supplementary Preambles, shall be read in conjunction with and shall form part of the descriptions of items in the bills of quantities

Where descriptions or Supplementary Preambles in the bills of quantities differ from these Model Preambles for Trades, the descriptions or Supplementary Preambles in the bills of quantities shall take precedence. Where supplementary preambles differ from descriptions in the bills of quantities, the descriptions in the bills of quantities shall take precedence

Except where otherwise stated, all preambles contained in any individual Trade Preamble shall apply equally to any work of a similar nature in all other trades

#### A.2 ABBREVIATIONS

The following abbreviations shall apply:

AASHTO - American Association of State Highway and Transportation Officials

AISI - American Institute of Steel Industries

BS - British Standard

CKS - Coordinating Specifications issued by the Central Coordinating Committee under the

auspices of the South African Bureau of Standards

CSIR - Council for Scientific and Industrial Research

SANS - South African National Standards and the number following shall refer to the

relevant specification or code of practice as the case may be

## A.3 MATERIALS AND WORKMANSHIP

Materials and workmanship shall be the best of their respective kinds. Only new and undamaged materials shall be used in the Works. Materials to be permanently installed into the works shall not be used for any temporary purposes on site. Work shall be to the approval of the Principal Agent and shall be executed in accordance with the relevant manufacturer's written recommendations and instructions where applicable

## A.4 PROPRIETARY PRODUCTS

For the purposes of submission of tenders, rates for items described in the bills of quantities by trade names, catalogue references, etc shall be for the particular type and manufacture specified

The approval of the Principal Agent shall be obtained prior to any substitution and where products or materials etc other than those specified are used, adjustments in the rates will be made if necessary

## A.5 ASSEMBLING

Rates for manufactured items shall include assembling complete and handing over in proper working order

## A.6 REFERENCES IN DESCRIPTIONS

Any references given in brackets at the end of certain descriptions shall refer to the relevant references on the drawings or schedules

#### A.7 WATER

Water shall be clean and free from injurious amounts of acids, alkalis, organic matter and other substances and shall be suitable for its intended use

## A.8 APPLICATION OF THE NATIONAL BUILDING REGULATIONS

All work shall be executed in accordance with the requirements of SANS 10400

## A.9 ACCURACY IN BUILDINGS

The dimensional and positional accuracy of the buildings and their component parts shall comply with Grade II requirements of SANS 10155 unless otherwise stated

## A.10 REFERENCES TO OTHER DOCUMENTS

References in these "Model Preambles for Trades" to other documents, including SANS, CKS and BS, shall pertain to the latest edition thereof including all amendments thereto at the date for submission of the tender

# B. ALTERATIONS

## B.1 ALTERATIONS

In taking down and removing existing work the utmost care shall be observed to prevent any structural or other damage to remaining portions of the building. The Contractor shall ensure the stability of all structures during alteration work

Special care shall be exercised during the progress of the work to ensure that any electrical installations, water supply pipes, telephone and other services which may be encountered are not interfered with and notice shall be given to the Principal Agent if any disconnection or alterations become necessary

The Contractor shall take all precautions necessary to prevent any nuisance from dust whilst carrying out the work

# B.2 MATERIALS FROM THE ALTERATIONS, CREDIT, ETC

Materials recovered from the alterations (except where described as to be re-used or to be handed over to the Employer) will become the property of the Contractor, who may allow credit in respect thereof where provided for in the bills of quantities. Such materials shall not be re-used in new work without written permission from the Principal Agent

Materials described as "removed" shall be removed from the site immediately.

Materials described as "handed over to the Employer" shall be carefully dismantled where necessary, neatly stored under cover on the site where directed and protected from damage, until required

Materials described as "set aside for re-use" shall be carefully dismantled where necessary, cleaned, neatly stored under cover and protected from damage until required for re-use. Any damage caused to such materials during removal, storage or refixing shall be made good at the Contractor's expense

## B.3 DISPOSAL OF DEBRIS ETC

The Contractor shall be responsible for the removal from the site of all materials, debris and rubbish resulting from the alterations

## B.4 MAKING GOOD DAMAGED WORK

The Contractor shall make good in all trades to existing work where damaged or disturbed through the alterations with all necessary new materials to match the existing

# B.5 FORMING NEW OPENINGS OR ALTERING OPENINGS IN EXISTING WALLS

Where new openings are formed or openings altered in existing walls, the wall above the opening shall be broken out and a new brick, in situ concrete or prestressed concrete lintel inserted, complete with all necessary reinforcement, formwork, turning piece, etc, the jambs and portions of openings as described shall be built up with new brickwork or blockwork properly toothed and bonded to existing, cavities of hollow walls shall be closed where necessary and finishes shall be made good all round and into reveals

## B.6 BUILDING UP OPENINGS

Where existing openings are given in number as built up, the existing surfaces all round shall be prepared as necessary, brickwork or blockwork properly toothed and bonded to existing, wedged up to underside of existing lintel and finishes shall be made good on both sides

# C. EARTHWORKS

## C.1 DEMOLITIONS

## C.1.1 Nature and extent

Descriptions of demolitions give a rough guide only as to the scope of the work. Tenderers are therefore advised to visit the site before submitting a tender and to acquaint themselves with the nature and extent of the work to be done and the value of recoverable materials which are not to be re-used or handed over to the Employer. Unless otherwise stated, loose furniture, kitchen and other equipment, apparatus, machinery, etc shall remain the property of the Employer and the removal thereof does not fall within the scope of this Contract

The Contractor shall completely demolish the buildings etc in a careful, skilful, practical and safe manner down to 150mm below ground level

Demolitions shall include breaking up and removing:

all floors and surface beds;

all external screen walls, steps, ramps, aprons, surface water channels, rainwater sumps, gulleys, etc attached to the building to be demolished;

all services, manholes, etc in ground to a point not less than 1m beyond the perimeter of the building including plugging off ends of all remaining pipes, drains, etc, filling in holes where necessary and ramming and levelling to ground level

Where only a portion of a building is to be demolished, it shall be done without damage to the remaining portion of the building. Any such damage shall be made good by the Contractor at his own expense

## C.1.2 Notices etc

The Contractor shall, before commencing work, obtain all necessary authorisation for carrying out the work, by whatever means including the use of pneumatic equipment or blasting, give all necessary notices and pay all charges and fees in connection therewith. He shall also comply with all regulations pertaining to rodent extermination and he shall obtain the requisite Rodent Extermination Clearance Certificate and pay all necessary fees. All receipts and certificates shall be left in the safekeeping of the Principal Agent. All the abovementioned charges and fees shall be paid by the Contractor and included in his prices

The Contractor shall give ample notice to the Principal Agent and Local Authorities regarding any disconnections necessary prior to the removal or interruption of electrical or telephone cables, water and sanitary services etc

#### C.1.3 Loss

After the handing over of the site to the Contractor, the full risk of any loss or damage to buildings to be demolished shall be the responsibility of the Contractor and he shall take such precautions as he deems necessary against such loss or damage

# C.1.4 Materials from the demolitions, credit, etc

Materials recovered from the demolitions will become the property of the Contractor, who may allow credit in respect thereof where provided for in the bills of quantities. Such materials shall not be reused in any new work without written permission from the Principal Agent

## C.1.5 Disposal of debris etc

The Contractor shall be responsible for the removal from the site of all materials, rubble, debris and rubbish resulting from the demolitions

## C.2 SOIL INSECTICIDES

The application of soil insecticides shall be carried out in accordance with "The application of soil insecticides for the protection of buildings" - SANS 10124

## C.3 ' FILLING ETC

## C.3.1 Filling generally

Filling over site shall be spread, levelled, watered and consolidated in layers not exceeding 300mm

Filling under floors and backfilling to excavations shall be suitable inert material, free from clay, vegetable matter, large stones, etc, having a maximum plasticity index of 10, spread, levelled and compacted to a density of at least 90% Mod. AASHTO

## C.3.2 Hardcore

Hardcore shall be broken stone or other approved hard material graded from 25mm to 75mm with the finer material on top and shall be spread, levelled and consolidated

## C.4 EXCAVATIONS

## C.4.1 Classification of excavated material

"Hard rock" shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives

"Soft rock" shall mean hard material the removal of which warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness

"Earth" shall mean all ground other than that classified as "hard rock" or "soft rock" and shall include made-up ground and any loose stones or pieces of concrete not exceeding 0,03m in volume

# D. CONCRETE, FORMWORK AND REINFORCEMENT

#### D.1 SPECIFICATION FOR CONCRETE WORK GENERALLY

All in situ concrete work (plain and reinforced) shall comply with SANS 1200G supplemented by the following Project Specification. Where SANS 1200G and the Project Specification are in conflict, the Project Specification shall take precedence

Wherever the term "Engineer" appears in SANS 1200G or in the following Project Specification this shall be deemed to mean the Principal Agent's representative responsible for this section of the Works

## PROJECT SPECIFICATION

The following amplifications, additions and amendments to SANS 1200G shall constitute the Project Specification. Clause numbers refer to either the existing clauses in SANS 1200G or to new clauses, which are related to the existing clauses

## 1. SCOPE

This clause is amended to include:

1.1 This specification does not cover the methods by which the finished structure is to be measured for the purpose of payment and the "Standard System of Measuring Building Work" shall apply

## 2. INTERPRETATIONS

#### 2.1 SUPPORTING SPECIFICATIONS

Clause 2.1(b) shall not apply

#### 2.2 APPLICATION

This clause shall not apply

#### 4. PLANT

## 4.5 FORMWORK

## 4.5.2 Finish

Unless otherwise stated the quality of all formwork shall be such that the finished surface of the concrete is "Rough" in terms of clause 5.2.1(a)

#### CONSTRUCTON

#### 5.2 FORMWORK

## 5.2.1 Classification of Finishes

- (a) Rough. No treatment of the surface of the concrete will be required after the striking of the formwork. The finish of the concrete need not be more accurate than Degree of Accuracy III
- (b) Smooth. Imperfections such as small fins, bulges, irregularities, surface honeycombing and surface discolorations shall be made good and repaired by approved methods. The finish of the concrete shall be accurate to Degree of Accuracy II

## (c) Special

## (i) Smooth and fair

This class of finish requires the highest standard of concrete work, formwork, accuracy and technique

Concrete placed in any one structure to give this finish shall be made from cement and aggregates from the same source. The grading of the aggregate shall be kept constant

Formwork shall be metal, wrot timber or other approved material in new condition designed and constructed to suit the particular job in hand and with shutter bolts and joints between panels in a regular pattern approved by the Principal Agent. Joints between panels shall be watertight, but the use of sealing tape which will mark the concrete shall not be permitted

Designated joints shall be in the position and of the details shown upon the working drawings. Should the Contractor wish to incorporate further construction joints or amend the position of those shown to suit his own requirements or technique, this may be allowed provided that all design considerations are met, that the prior approval of the Engineer is obtained and that any extra costs are borne by the Contractor

In the case of horizontal construction joints, the top edge of the concrete on the smooth and fair finished side shall be struck true and level with a trowel

Special care shall be taken to ensure that forms are clean and free of all pieces of tying wire, nails and other debris at the time of concreting

The standard of finish shall be such that upon removal of the formwork, no further treatment, other than treatment of bolt holes if required, shall be found necessary to provide a straight, smooth and uniform finish of good quality and consistent colour and texture, free of all honeycombing etc. Any defect shall be made good by either removing and replacing the defective concrete or, in certain instances only, by patching

## 5.5 CONCRETE

## 5.5.1.6 Prescribed mix concrete

Where prescribed mix concrete is specified the proportions of constituents, the maximum size of coarse aggregate and the estimated minimum compressive strength shall be as specified in the following table:

	Estimated	Maximum nominal size of coarse aggregate in mm	Proportions of Constituents		
Class of Concrete	minimum compressive strength in MPa at 28 days		Cement (Parts)	Fine aggregate (Parts)	Coarse aggregate (Parts)
А	7	37,5	1	4	8
В	15	19	1	3	5
С	20	19	1	2,5	3,5

Cement shall comply with SANS 50917-1 of strength 32,5N or higher

Should cement and aggregates be mixed by volume, the contents of a 50kg sack of cement shall be taken to be  $0.033 \, \mathrm{m}$ 

Notwithstanding the requirements contained in SANS 1200G, the Principal Agent may permit certain items of non-structural concrete to be mixed by hand

If the concrete is mixed by hand, it shall first be mixed in a dry state on a clean non-absorbent surface until it is of uniform colour and consistency. Just enough water shall then be added to permit mixing and working, at which stage the concrete shall continue to be mixed until it is of uniform colour and consistency

## 5.5.1.7 Strength concrete

Where strength concrete is specified it shall be designated by its specified strength followed by the size of stone used in its manufacture, eg 30 MPa/19mm

The water/cement ratio shall be as Table 5 of clause 5.5.1.5 for moderate exposure conditions

## 5.5.1.8 "No-Fines" concrete

"No-fines" concrete shall consist of one part cement to eight parts aggregate graded from minimum 6mm to maximum 13mm size

The quantity of water used shall be just sufficient to form a smooth grout which shall completely coat every particle of aggregate and also to ensure that the grout is just wet enough to form a small fillet at each point of contact between the stones. "No-fines" concrete mixed with excessive water, which results in a thin grout, which drops off the aggregate, will be rejected

"No-fines" concrete shall be placed in its final position within 20 minutes of mixing and shall be placed in continuous horizontal layers. Concrete shall be spade worked sufficiently to ensure that it fills the forms but vibrating, tamping or ramming will not be permitted

## 5.5.3.2 Ready-mixed concrete

The use of ready-mixed concrete and the acceptability of test results from a central concrete production facility shall be subject to the written approval of the Engineer

## 6. TOLERANCES

Degree of Accuracy II shall apply for all work unless otherwise stated

## 7. TESTS

#### 7.1 FACILITIES AND FREQUENCY OF SAMPLING

#### 7.1.2 Frequency of sampling

7.1.2.5 The frequency of sampling shall be as directed by the Engineer, but not less than one set of cubes from every 50m³ cast

## 8. MEASUREMENT AND PAYMENT

This clause shall not apply

## D.2 AGGREGATES OF LOW DENSITY

Aggregates of low density shall comply with SANS 794

## D.3 HOLLOW BLOCKS, PREFABRICATED BLOCK BEAMS AND PLANKS, ETC

Blocks, block beams, planks, etc shall be fixed and supported in such a manner that no movement can take place before or during the casting of concrete. No broken components shall be used

## D.4 SUPERVISION

A competent and experienced foreman shall superintend personally the whole of the concrete construction and pay special attention to:

- (a) The quality, testing and mixing of materials,
- (b) The placing and compaction of concrete,
- (c) The construction and removal of formwork and
- (d) The sizes and position of reinforcement

The Contractor shall obtain the permission of the Principal Agent before commencing concreting of foundations or reinforced structure

No inspection, approval, authorisation to proceed, comment or instructions following from such an inspection, or failure of the Principal Agent to comment on any particular aspect of the work, shall be deemed to relieve the Contractor in any way from his obligation to ensure through his own supervision that the work is constructed in every way in accordance with the Drawings, Specification and Conditions of Contract, nor relieve him from his obligations to make good any fault or defect, nor shall it be deemed that there is any obligation on the Principal Agent to inspect all or any part of the Works or that such inspection is necessarily complete in every respect

#### D.5 GENERAL

#### Concrete

Rates for concrete work shall include all "construction joints" other than "designated joints" as defined in SANS 1200G clause 2.4.3 which are measured separately, and for the design of strength concrete mixes and all testing of concrete and materials other than compressive strength testing of concrete samples taken from concrete being placed in the Works. The Contractor shall only be entitled to payment for those samples and compressive strength tests called for by the Engineer and which pass the test requirements

Surface beds cast in panels shall be cast in panels approximately  $9\text{m}^2$ 

## Formwork

Formwork to slabs and beams shall be cambered where required Rates for formwork to soffits shall include propping not exceeding 3,5m high unless otherwise described. Formwork to walls and columns is not exceeding 3,5m high above bearing level unless otherwise described

## Reinforcement

Standard welded steel fabric reinforcement shall be as included in Table 1 of SANS 1024 and shall have 300mm wide laps.

The mass of binding wire is not included in the mass of the reinforcement and the cost thereof shall be included in the rates for the reinforcement

## E. PRECAST CONCRETE

## E.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Precast concrete paving slabs

**SANS 541** 

Cement, water, aggregates and reinforcement shall be as described under D. CONCRETE, FORMWORK AND REINFORCEMENT

#### E.2 CONCRETE

Concrete shall be as described under D. CONCRETE, FORMWORK AND REINFORCEMENT and unless otherwise stated shall be prescribed mix concrete Class C but with coarse aggregate of an appropriate size

## E.3 MOULDS

Before each casting, moulds shall be coated with a suitable release agent which will not in any way discolour the surface of the finished product or impair its strength. Where items are described as "finished smooth from the mould" or as "precast terrazzo", moulds shall be made to a high degree of accuracy and shall be such as to leave even and smooth surfaces

## E.4 FINISHES TO BLOCKS

Where described as "precast terrazzo", such surfaces shall have a facing of terrazzo described under O. PLASTERING. The facing shall be poured into the moulds in a wet state (not dry pressed) and thoroughly worked up against finished faces to ensure that it finishes smooth from the mould

Projections shall be rubbed off and faces shall be of even colour and free from blemishes, cracks and other imperfections. Salient angles shall be arris rounded

## E.5 CASTING ETC

Items shall be sultably cured, shall not be handled whilst still green and shall not be built in within 21 days of casting

## E.6 REINFORCEMENT

Unspecified reinforcement required for manufacturing, handling and erection purposes and for reinforcing projecting and other unwieldy portions of blocks shall be provided by the Contractor at his discretion

## E.7 BEDDING, JOINTING AND POINTING

Blocks shall be bedded and jointed solidly in Class I mortar as described under F. MASONRY and shall be pointed with slightly keyed joints

Blocks finished with "precast terrazzo" shall have joints raked out and pointed with slightly keyed joints in tinted waterproofed mortar composed of one part cement and three parts sand to match terrazzo facing

## E.8 GENERAL

Precast concrete work shall include reinforcement required for manufacturing, handling and erection purposes, steel rod or wire hooks and/or mortices for lewis bolts required for handling and transporting, any necessary temporary propping and strutting and bedding, jointing and pointing

# F. MASONRY

## F.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Burnt clay masonry units SANS 227

Limes for use in building SANS 523 (Slaked (hydrated) limes)

Aggregates from natural sources -

fine aggregates for plaster and mortar SANS 1090

Concrete masonry units SANS 1215

Prestressed concrete lintels SANS 1504

Burnt clay paving units SANS 1575

Metal ties for cavity walls SANS 28

Common cement SANS 50197-1 (Class 32,5N)

Masonry cement SANS 50413-1 (Class 22,5X)

Concrete masonry construction SANS 10145

The structural use of masonry SANS 10164-1

Masonry walling SANS 10249

Concrete floors SANS 10109-1&2

## F.2 SAND

Sand shall be washed where necessary and screened through a 2,4mm mesh sieve

## F.3 BURNT CLAY BRICKS

Burnt clay bricks shall be of nominal size 222 x 106 x 73mm unless otherwise stated

Common bricks shall be General Purpose bricks

Extra hard burnt bricks shall be General Purpose (Special) bricks

Facing bricks shall exhibit a liability to efflorescence not in excess of "Slight" and water absorption when tested in conformity with the requirements of SANS 227 shall not exceed 14%

Particular care shall be taken to preserve arrisses and faces of facing and paving bricks during transit and handling

## F.4 CONCRETE BRICKS

Concrete bricks shall have a nominal compressive strength of 8 MPa

## F.5 QUARRY TILES ETC

Quarry, cement and similar tiles shall be of approved manufacture, even in shape and size, free from cracks, twists or blemishes and uniform in colour

## F.6 WIRE TIES

Wire ties shall be of galvanized steel of the single wire type for solid walls and either the "Butterfly" or Modified PWD type for hollow walls. Ties shall be of sufficient length to allow not less than 75mm of each end to be built into brickwork or embedded in concrete

## F.7 BRICKWORK REINFORCEMENT

Brickwork reinforcement shall be manufactured from hard drawn steel wire conforming to BS 785 and shall consist of two 2,8mm diameter main wires with 2,5mm diameter cross wires at 300mm centres welded at intersections

Brickwork reinforcement shall be lapped not less than 300mm at end joints and for a length equal to the width of the widest reinforcement at intersections

#### F.8 MORTAR

Mortar shall comply with the following table:

1	2	3	4
Mortar Class	Minimum compresive strength MPa	Cement:sand (common cement)	Cement:sand (masonry cement)
1	10	1:4 or 50kg to 130 litres	1:3 or 50kg to 100 litres
	5	1:6 or 50kg to 200 litres	1:5 or 50kg to 170 litres
111	1,5	1:9 or 50kg to 300 litres	1:6 or 50kg to 200 litres

Mortar shall be Class II unless otherwise specified

Mortar plasticizers may only be used with the approval of the Principal Agent

The materials shall be mixed dry until of uniform colour, water added and the mixture turned over until the ingredients are thoroughly incorporated

Mortar shall be produced in such quantities as can be used before commencement of set and no mortar that has set shall be used

#### F.9 COMPO MORTAR

1

Compo mortar shall be Class III mortar in accordance with clause F.8 but with a lime content of 80 litres

The lime and sand shall be mixed dry until of uniform colour, water added and the mixture turned over until the ingredients are thoroughly incorporated. Immediately before use, the cement shall be mixed in and the requisite amount of water added. Compo mortar shall be produced in such quantities as can be used before commencement of set and no compo mortar that has set shall be used

## F.10 BRICKWORK

Wherever practicable, brickwork shall be built in stretcher bond. Unless legitimately required to form bond, no false headers shall be used. English bond shall only be used where specifically so indicated or where stretcher bond is not practicable

Brickwork, unless otherwise described, shall be built in Class II mortar

Bricks shall be laid on a solid bed of mortar and all joints shall be grouted up solid

The brickwork shall be carried up in a uniform manner, no part being raised more than 1,2m above adjoining work

Where necessary, bricks shall be wetted before being laid and the course of bricks last laid shall be well wetted before laying a fresh course upon it

Walls in thicknesses of more than one skin shall have at least five wire ties per square metre. Linings to concrete, unless otherwise specified, shall be tied to the concrete with at least five wire ties per square metre

Hollow walls, unless otherwise specified, shall be built of two half brick skins with cavity between, tied together with at least five wire ties per square metre. The cavities shall be kept free of all rubbish, mortar droppings and projecting mortar. Mortar joints to brickwork shall be not less than 8mm or more than 12mm thick

## F.11 BLOCKWORK

Unless otherwise described, all blockwork shall be built in stretcher bond. Whole blocks shall be used except where bats or closers are required to form bond. Blockwork, unless otherwise described, shall be built in Class II mortar

Solid blocks shall be laid on a solid bed of mortar and all joints shall be grouted up solid

Hollow blocks shall be laid in shell bedding, ie only the inner and outer shells of the blocks shall be covered with mortar. Vertical joints shall be similarly formed

The blockwork shall be carried up in a uniform manner, no part being raised more than 1,2m above adjoining work

Clay blocks shall be wetted before being laid and the course of blocks last laid shall be well wetted before laying a fresh course upon it

## F.12 CENTRES AND TURNING PIECES

Centres and turning pieces to soffits of arches and lintels shall be left in position for not less than 14 days

#### F.13 FACE BRICKWORK

į )

Face brickwork shall be built in stretcher bond, unless otherwise specified, to a true and fair face. Perpends shall be vertically aligned

Facing bricks shall be mixed to ensure that the proper blending of bricks within the colour range of each facing brick being used is obtained

## F.14 PAVINGS, SILLS, COPINGS, ETC

Clay bricks and tiles shall be wetted before fixing and shall be solidly bedded and jointed in Class I mortar and pointed with slightly keyed joints

# G. WATERPROOFING

## G.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Bituminous damp-proof courses SANS 248 (Type FV)

Polyolefin film for damp- and waterproofing in

buildings (walls, sills, etc) SANS 952 (Type B)

Polyolefin film for damp- and waterproofing in

buildings (floors and basements) SANS 952 (Type C)

Mastic asphalt for roofing SANS 297

Mastic asphalt for damp-proof courses

and tanking SANS 298

Bituminous roofing felt SANS 92 (Type 60)

Polyolefin film for damp- and waterproofing in

buildings (flat roofs) SANS 952 (Type A)

Chloroprene rubber sheet (for waterproofing) SANS 580

Sealing compounds for the building industry,

two-component, polysulphide base SANS 110 (Type 2 - Gun Grade)

Sealing compounds for the building and construction

industry, two-component, polyurethane base SANS 1077

The waterproofing of buildings (including damp-

proofing and vapour barrier installation) SANS 10021

## G.2 WATERPROOFING TO ROOFS, BASEMENTS, ETC

Waterproofing to roofs, basements, etc shall be carried out by workmen who are experienced in this type of work

## G.3 DAMP-PROOF COURSE TO WALLS

All joints in damp-proof course to walls shall be lapped a minimum of 150mm except at junctions and corners where the lap shall equal the full thickness of the wall

## H. ROOF COVERINGS ETC

#### H.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Concrete roofing tiles SANS 542

Clay roofing tiles SANS 632

Sawn softwood timber battens SANS 1783-4

Fibre-cement sheets (flat and profiled) SANS 685

Aluminium alloy corrugated and troughed sheets SANS 903

Continuous hot-dip zinc-coated carbon steel sheet

of commercial, lock-forming and drawing qualities SANS 3575

Continuous hot-dip zinc-coated carbon steel sheet

of structural quality SANS 4998

Polyolefin film for damp- and waterproofing in buildings

bullungo

SANS 952

**SANS 1150** 

Metal roofing tiles SANS 1022

Glass-reinforced polyester (GRP) laminated sheets

(profiled or flat)

Fasteners for roof and wall coverings in the

form of sheeting SANS 1273

Materials for thermal insulation of buildings SANS 1381-1&4

Expanded polystyrene thermal insulation boards SANS 1508

Fixing of concrete interlocking roofing tiles SANS 10062

Roof and side cladding SANS 10237

Sheet zinc BS 849

Sheet lead BS 1178

Sheet aluminium BS 1470

Sheet copper BS 2870

#### H.2 GALVANIZED STEEL PROFILED SHEETS ETC

Galvanized steel profiled sheets, ridge and hip coverings, etc shall be coated with a minimum of 275 g zinc per m² and shall be free of white rust

## H.3 GALVANIZED SHEET IRON

Galvanized sheet iron shall be rolled steel sheet coated on both sides with a minimum of 275 g of zinc per m<sup>2</sup> and shall be free from white rust

## H.4 NAILING AND SCREWING

Where nailing and screwing is required:

- · galvanized iron nails and screws shall be used for galvanized sheet iron and sheet zinc
- · copper or copper alloy nails and screws for sheet copper and sheet lead
- aluminium alloy or stainless steel nails and screws for sheet aluminium

## H.5 LAPS

Sheet metal flashings shall have minimum 100mm laps and linings to valleys, secret gutters, etc minimum 225mm laps

## H.6 GENERAL

Rates for profiled sheet roofing and rolled edges, ridge and hip coverings, flashing pieces, etc of metal, fibrecement, plastic, etc shall include fixing accessories

# I. CARPENTRY AND JOINERY

#### I.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Sawn softwood timber: General requirements SANS 1783-1

Sawn softwood timber: Stress-graded structural

timber and timber for frame wall construction SANS 1783-2

Sawn softwood timber: Brandering and battens SANS 1783-4

Softwood flooring boards SANS 629

Hardwood furniture timber SANS 1099

Hardwood block and strip flooring SANS 281

Wooden ceiling and panelling boards SANS 1039

Laminated timber (glulam) SANS 1460

Gypsum plasterboard SANS 266

Fibreboard products SANS 540

Wood-wool panels (cement bonded) SANS 637

Fibre-cement sheets (flat and profiled) SANS 685

Fibre-cement boards SANS 803

Plywood and composite board SANS 929

Wooden ceiling and panelling boards SANS 1039

Particle boards SANS 50312-1to7

Decorative laminates SANS 4586

Wooden doors SANS 545

Fire doors SANS 1253

Materials for thermal insulation of buildings SANS 1381-1,2,4&6

Expanded polystyrene thermal insulation boards SANS 1508

Mild steel nails SANS 820

Metal screws for wood SANS 1171

Wood-preserving creosote SANS 539

Softwood shall bear the relevant SABS mark and shall be ordered in the sizes in which it will be used as no scantlings of marked timber will be allowed. Should SABS marked timber be unavailable, the Principal Agent's prior permission shall be obtained before using unmarked timber

## I.2 HARDWOODS

All hardwoods shall be specially selected, well seasoned, free from sapwood and well kiln dried. Meranti shall be Red or Medium Brown Meranti, even in grain and colour, selected from "Standard and Better" quality from Malaysia

## 1.3 INFECTION AND PRE-TREATMENT OF TIMBER

All timber used on the site, whether for permanent or temporary work, shall be free of borer or other beetle and termite infection. If the work under this contract falls within an area designated under Government Notice R2577 of 197812-29, permanent softwood fixed in the building shall be treated against borer etc in accordance with Government Notice R451 of 1969-03-28 using Class B or C preservative

When treated timbers are cut, the cut surfaces shall be effectively brushed with at least two coats of preservative solution

#### I.4 CONSTRUCTION IN GENERAL

Where applicable, construction methods shall comply with SANS 10082. Wood and laminate flooring shall be installed in accordance with SANS 10043. Roof trusses shall be manufactured, erected and braced in accordance with SANS 10243

## 1.5 STRUCTURAL TIMBER

Timbers generally shall be in single lengths and jointing of timbers will only be permitted when the required length is unobtainable. Only the absolute minimum of joints to obtain a particular length will be permitted and such joints are to be evenly spaced along the length of the timber

Finger-jointing of structural timber will be permitted, in which case it shall be manufactured in accordance with SANS 10096

#### 1.6 PLATE NAILED TIMBER ROOF TRUSSES

Plate nailed timber roof trusses shall be of approved design and manufacture and constructed with softwood structural timber by a truss Fabricator holding a current Certificate of Competence awarded by the Institute of Timber Construction

Each roof truss shall have all its members accurately cut and closely butted together and rigidly fixed by CSIR approved patented galvanized metal spiked connectors, precision pressed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions

The design, manufacture and transportation of the roof trusses, bracing, etc shall be under the control of a registered Structural Engineer in accordance with SANS 1900, SANS 10160 and SANS 10163, who shall, after erection, provide a certificate confirming that the design, manufacture, transportation, erection and bracing has been carried out in accordance with this specification

The design shall include for all live loads, wind loads and for dead loads imposed by roof covering, purlins, ceilings, etc

Fully detailed shop drawings of all trusses etc, indicating sizes, bracing, loading, etc, shall be submitted to the Principal Agent for approval prior to fabrication

Unless specific erection instructions are given, erection shall be carried out in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber Roof Trusses" published by the Institute for Timber Construction and the Council for Scientific and Industrial Research or as detailed by the designer

Roof trusses and bracing shall include design and preparation of shop drawings

## I.7 TONGUED AND GROOVED BOARDING

Tongued and grooved boards for floors, panelling, etc shall be in long varying lengths with joints tightly cramped up and secret nailed. Flooring boarding shall be flush jointed with staggered heading joints and machine sanded after fixing

## I.8 JOINERY

Skirtings, cornices, rails, etc shall be in single lengths wherever practicable and shall have splayed heading joints where

necessary. Skirtings shall be trenched at back

All horns of door frames shall be checked and splayed back where frames are fixed projecting or flush with surface and built in

Heads of screws in exposed faces of hardwood joinery shall be sunk and match pelleted

Joinery shall have arris rounded angles and shall be blocked and planted on

## I.9 VENEERS

All face veneers shall be of kiln dried timber, free from knots, cracks, patchwork, sapwood and other defects, selected and glued, dried and machine-sanded to a smooth finish. All veneers shall be applied under hydraulic pressure

## I.10 DOORS

Flush doors shall have solid timber edge strips with concealed edges. Where doors are to be finished with a transparent finish, the veneer and the edge strips shall be timber of the same species and as far as possible of matching colour. Unless otherwise described all flush doors shall be of interior quality, but where exterior quality doors are specified the glue used shall be of the WBP type

Framed and ledged batten doors described as filled in with V-jointed boarding shall be filled in flush on one side with tongued and grooved vertical boarding, V-jointed on one or both sides and of the thickness stated. The boarding shall be in narrow widths, closely cramped up, rebated or tongued on outer edges and housed to grooves in stiles and rails and twice countersunk brass screwed at each intersection with ledges and braces and the inner edges of the abutting stiles and rails shall be chamfered to form a V-joint at junction with the board

Unless otherwise described double doors shall have rebated meeting stiles

#### I.11 FIXING

All nails and screws shall be of the size, length and type appropriate to their respective uses. All screws for hardwood joinery work shall be brass

Items described as "plugged" shall be screwed to fibre, plastic or metal plugs at not exceeding 600mm centres. Where items are described as "bolted", the bolts have been given separately

## I.12 ADHESIVES

Adhesives shall comply with BS 1204 and 4071 where applicable. Adhesives used in the manufacture of external joinery exposed to excessive moisture (eg kitchen and laboratory worktops) shall be of the WBP type

## J. CEILINGS, PARTITIONS AND ACCESS FLOORING

#### J.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Gypsum plasterboard SANS 266

Fibreboard products SANS 540

Gypsum cove cornice SANS 622

Wood-wool panels (cement-bonded) SANS 637

Sawn softwood timber: Brandering and battens SANS 1783-4

Sawn softwood timber: Timber for frame wall

Construction SANS 1783-2

Fibre-cement boards SANS 803

Plywood and composite board SANS 929

Wooden ceiling and panelling boards SANS 1039

Materials for thermal insulation of buildings SANS 1381-1&4

Expanded polystyrene thermal insulation boards SANS 1508

Raised access flooring SANS 1549

## J.2 TONGUED AND GROOVED BOARDING

Tongued and grooved boarding for ceilings shall be in long varying lengths, V-jointed one side and with joints tightly cramped up and secret nailed

#### J.3 CEILINGS ETC

#### J.3.1 Brandering

Brandering for ceilings and eaves soffit coverings shall be symmetrically arranged with necessary smaller panels. Main branders shall be at right angles to roof timbers, with cross branders cut in between and branders shall be fixed with galvanized wire nails driven in on skew alternately in opposite directions

#### J.3.2 Ceiling boards

Ceiling boards shall be in long lengths symmetrically arranged with necessary smaller panels, closely butted and secured at 150mm centres to brandering with galvanized or cadmium-plated clout-headed nails

## J.4 GYPSUM SKIM PLASTER

Gypsum skim plaster shall be pure gypsum plaster finished with a steel trowel

## J.5 EXPOSED TEE-SYSTEM SUSPENDED CEILINGS

The ceiling panels shall be as described in the items and the panels shall be stiffened at back as recommended by the manufacturer to prevent bowing or sagging

The exposed surfaces of all ceiling panels and supporting members shall be uniform in colour and free from surface blemishes

The suspension grid system shall be an approved patent suspension system comprising 38mm galvanized steel main and cross tee bearers spaced in both directions at centres to suit sizes of ceilling panels used, with the cross bearers fitted between and notched to form flush fit with main bearers. The exposed flange of the tees shall be 25mm wide, covered with a rolled aluminium cap painted a low sheen satin white. Cornices etc shall be as described in the items and shall be finished to match the exposed tees

The main tee bearers shall have holes for cross tees at 300mm centres and holes for hangers at 50mm centres. In addition, main and cross tee bearers shall be holed as necessary for and provided with timber wedges or steel clips where recommended by the manufacturer to prevent ceiling panels from lifting

The web of the exposed cross tee bearers shall extend to form a positive interlock with the main tee bearers and the lower flange shall be cut back to provide a joint free appearance

All hangers shall be galvanized and shall be at centres to meet the requirements of the specification with one end fixed to the suspension grid main bearers and the other end fitted with suitable galvanized fixing cleat securely fixed to the structure. Fixing points shall be agreed to by the Principal Agent before any power shot fixings are made. Hangers shall not be suspended from air-conditioning ducts. Where recommended by the manufacturer, hangers shall be of the rigid type

Component parts and fixings shall be non-corrosive and able to withstand atmospheric pollution. Surfaces of aluminium which are in contact with other materials when fixed, particularly metals, shall be suitably insulated to prevent electrolytic corrosion

Ceilings shall comprise hangers, suspension grid system and ceiling panels, shall be constructed in a manner suitable for carrying air-conditioning diffusers and light fittings in the positions required, shall be set out to layouts approved by the Principal Agent and shall have the standard suspension systems modified as necessary to work around any pipes or light fittings

## J.6 FLUSH PLASTERED SUSPENDED CEILINGS

Gypsum plasterboard panels of the specified thickness generally in 1200mm widths and in long lengths shall be fixed grey side down with self-tapping screws to the suspension system with the joints between boards loosely butt jointed and covered with 50mm wide strips of self-adhesive fibre tape

The plasterboard panels shall be finished with gypsum skim plaster trowelled to a smooth polished surface to the thickness etc recommended by the manufacturer

The suspension system shall be an approved patent concealed suspension system consisting of galvanized mild steel bearers suspended on approved non-rusting metal hangers spaced generally at 1200mm centres or to suit layout of air-conditioning ducts and other services etc above ceiling with one end bolted to the bearer and the other end fitted with a galvanized fixing cleat securely fixed to the structure as required

Fixing points shall be agreed to by the Principal Agent before any power shot fixings are made. Hangers shall not be suspended from air-conditioning ducting

Ceilings shall comprise hangers, suspension system, ceiling panels and plaster finish, shall be constructed in a manner suitable for carrying air-conditioning diffusers and light fittings in the positions required, shall be set out to layouts approved by the Principal Agent and shall have the standard suspension system modified as necessary to work around any pipes or light fittings

# K. FLOOR COVERINGS, WALL LININGS, ETC

## K.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Semi-flexible vinyl floor tiles SANS 581

Resin modified vinyl floor tiles SANS 586

Flexible vinyl flooring SANS 786

Hardwood block and strip flooring SANS 281

Wood mosaic flooring SANS 978

Textile floor coverings (pile construction) SANS 1375

Textile floor coverings (needle-punched

construction) SANS 141

Carpet underlays SANS 1419

The installation of wood and laminate flooring SANS 10043

The installation of resilient thermoplastic

and similar flexible floor covering materials SANS 10070

The installation of textile floor coverings SANS 10186

Sheet linoleum (calendered types), cork, carpet and linoleum tiles

carpet and linoleum tiles BS 810

Solid rubber flooring BS 1711

Felt backed linoleum BS 1863

## K.2 LAYING OF MATERIAL

Floor tiles shall be laid with continuous joints in both directions

Patterned floor coverings shall be matched at joints

## K.3 GENERAL

Floor coverings, wall linings, skirtings, nosings, etc shall include all preparatory work to screeded or plastered surfaces etc, priming coats and adhesives

Floor coverings and wall linings shall be dressed around and into corners. Wood block and wood mosaic flooring shall be sanded with a sanding machine and sealed with a coat of approved penetrating sealer

Plastic handrails shall have welded and polished butt joints

## L. IRONMONGERY

#### L.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Locks, latches and associated furniture

for doors. (Domestic type)

SANS 4

Kitchen cupboards: Built-in and free-standing

**SANS 1385** 

Single action closers

**SANS 1510** 

Padlocks

SANS 1533

Fasteners

SANS 1700

Chalk writing boards for schools

**CKS 36** 

## L.2 KEYS

Locks shall have the minimum possible number of interchangeable keys. Cylinder locks and locks described as "en suite" shall be clearly marked with consecutive numbers and each key shall be punched with the corresponding number of the relative lock

## L.3 FIXING

Unless otherwise described, ironmongery is to be fixed to wood

Items described as "plugged" shall be screwed to fibre, plastic or metal plugs

Screws, bolts, etc for fixing of ironmongery shall be of matching metal and finish, except for aluminium ironmongery or ironmongery fixed to aluminium in which cases stainless steel screws may be used

All necessary preparation of pressed steel door frames for the fixing of ironmongery to the frames has been included with the pressed steel door frames

## L.4 KITCHEN CUPBOARDS

Kanada kanada

Steel cupboards shall be finished with baked enamel. Tops of floor cupboards shall have laminated plastic covering

Cupboards shall be fitted with all necessary hinges, handles, catches, etc. Cupboards shall be securely fixed with all necessary screws and fibre, plastic or metal plugs

Where cupboards are described as a "series", tops shall be continuous and cupboards shall be bolted or screwed together, including bolts, screws, holes, etc

## M. STRUCTURAL STEELWORK

#### M.1 SPECIFICATION

All structural steelwork shall comply with SANS 1200H or 1200HA as applicable. Structural fasteners shall comply with SANS 1700

Whenever the term "Engineer" appears in SANS 1200H or 1200HA or in the following Project Specification this shall be deemed to mean the Principal Agent's representative responsible for this section of the Works

# M.2 PROJECT SPECIFICATION INCORPORATING AMPLIFICATIONS, ADDITIONS AND AMENDMENTS TO SANS 1200H AND 1200HA

The following amplifications, additions and amendments to SANS 1200H and SANS 1200HA shall apply and clause numbers refer to either the existing clauses in the relevant SANS or to new clauses which are related to the clauses therein

**SANS 1200H** 

#### 3.1.1 Weldable structural steel

Weldable structural steel shall comply with SANS 1431

#### 5.1.2 Contractor provides shop details

The Contractor shall be responsible for the preparation of all shop detail drawings

## 5.1.3 Engineer provides shop details

This clause shall not apply

#### 5.3.9 Protective treatment

Structural steelwork shall be cleaned and prepared by wire brushing in accordance with SANS 10064 and all surfaces shall be primed as specified to a minimum dry film thickness of 30 micrometres before leaving the workshop. Upon delivery to the site and again after erection all bared surfaces shall be made good with similar primer

#### Measurement and payment

This clause shall not apply

**SANS 1200HA** 

## 5.2.10 Protective treatment

Structural steelwork shall be cleaned and prepared by wire brushing in accordance with SANS 10064 and all surfaces shall be primed as specified to a minimum dry film thickness of 30 micrometres before leaving the workshop. Upon delivery to the site and again after erection all bared surfaces shall be made good with similar primer

## 5.3.7 Repairs to paint and site painting

This clause shall not apply

## 8. Measurement and payment

This clause shall not apply

## N. METALWORK

## N.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

**SANS 1700** Fasteners Expanded metal SANS 190-1&2 Windows and doors made of rolled mild steel **SANS 727** sections Hot-dip galvanized zinc coatings on fabricated iron and steel articles **SANS 121** Strongroom and vault doors **SANS 949** Anodized coatings on aluminium (for architectural applications) **SANS 999** Steel door frames **SANS 1129** Mushroom- and countersunk-head bolts and nuts **SANS 1143 SANS 1044** Welding of metalwork Adjustable glass-louvred windows **CKS 413** BS 1470 Aluminium sheet and strips Aluminium extruded tube and hollow sections BS 1474 Aluminium bars and sections BS 1476

## N.2 STEEL

: )

Steel shall be mild steel of approved commercial quality. Steelwork shall be cleaned and prepared by wire brushing in accordance with SANS 10064 and given one coat of primer as specified before leaving the workshop

## N.2.1 Galvanizing of steel

Steelwork described as "galvanized" shall be galvanized by means of the hot-dip process after fabrication. Where welding on site is unavoidable, such welded joints shall be cleaned down and cold galvanized to approval

## N.3 STAINLESS STEEL

Stainless steel shall be AISI Type 304 stainless steel and shall be buffed to an even satin finish. Stainless steel screws shall be used for fixing stainless steel

## N.4 ALUMINIUM

Aluminium extrusions shall be of 6063-T6 alloy and temper. Aluminium sheet and strips shall be of 1200-H4 alloy and temper.

Joints in all aluminium members shall be formed in an approved manner so that the joints are practically invisible. Screw heads, pins, rivets, etc shall be concealed as far as possible. 300 Series stainless steel screws and bolts shall be used for jointing and fixing aluminium work

The surfaces of all aluminium which are in contact with other materials when fixed shall be suitably insulated with a non-absorbent insulating material to prevent corrosion. All aluminium work shall be suitably protected against damage, deterioration or discolouration caused by mortar droppings, paint, etc by taping with removable tape, covering with temporary casings or by covering with motor oil

#### N.4.1 Anodizing of aluminium

Aluminium described as "anodized" shall be treated with Grade 25 coating thickness for exterior use or Grade 15 for interior use as specified, to the required finish. All alloys to be anodized shall be suited to anodizing

#### N.5 BOLTS AND NUTS

Nuts shall be of at least the strength grade appropriate to the grade of bolt or other threaded element with which they are used

## N.6 SCREWING OF METALWORK TO STEEL, WOOD, CONCRETE, ETC

Metalwork described as "screwed" to steel, wood, etc or "plugged" to brickwork, concrete, etc shall be fixed at not exceeding 500mm centres, with necessary holes, countersinking, threading, screws, set screws, self-tapping screws and fibre, plastic or metal plugs

## N.7 BOLTING OF METALWORK

Where metalwork is described as "bolted" to steel, wood, brickwork, concrete, etc the bolts are measured elsewhere

## N.8 WELDING OF METALWORK

All welds shall be cleaned and filed or ground off smooth to approval. All welded joints shall be continuous

## N.9 METALWORK GENERALLY

Metalwork shall have all sharp edges ground smooth. Tubular and pipe work shall include running joints. Rails etc described as "continuous" shall be in long lengths with welded joints

## N.10 PRESSED STEEL DOORS, FRAMES, ETC

#### N.10.1 Door frames

. )

Frames shall project not less than 20mm into floor finish. Except where described as galvanized, frames shall be primed as specified before leaving the factory. Frames are to jambs and heads of openings. Frames for single doors shall be provided with two 100mm steel butt hinges and an adjustable striking plate for a mortice lock and frames for double doors shall be provided with four 100mm steel butt hinges. Butt hinges shall be steel butts with loose pins, welded to frames. Where necessary mortar caps shall be welded to frames and back plates shall be welded on behind tappings for screws

## N.10.2 Cupboard door frames

Cupboard door frames shall be as described in N.10.1, but with thresholds of unequal channel section, two 100mm steel butt hinges to hanging stiles, two 75mm steel butt hinges to hanging stiles above transoms, necessary striking plates for mortice locks and keeps for barrel bolts

## N.10.3 Combination doors and frames

Combination doors and frames shall be manufactured of 1,6mm thick steel plate. Frames shall be as described in N.10.1. Doors shall be standard design and required profile, with a 44mm wide edge all round, vertical reinforcing ribs pressed in and with two reinforcing rails welded on. The door shall be provided with two lever mortice lock with lock box welded to inside. Doors shall be welded to steel butts

#### N.10.4 Transformer room doors and frames

Transformer room doors and frames shall be manufactured of 1,6mm thick steel plate. Frames shall be as described in N.10.1. Doors shall be of standard design with a 44mm wide edge all round, vertical reinforcing ribs pressed in and with three reinforcing rails welded on. Single doors shall be fitted with a padlock cleat and two 100mm brass pintle hinges and double doors shall be fitted with a padlock cleat, two 150mm bolts and four 100mm brass pintle hinges. Each leaf shall be fitted with a louvered ventilation panel of standard design backed with 6mm mesh galvanized wire vermin proof screen

## N.10.5 Sizes

The frame widths given refer to unfinished wall thicknesses

## N.10.6 Glazing beads

Where specified, glazing beads shall be 12 x 12mm standard metal glazing beads mitred at angles and countersunk screwed on at not exceeding 300mm centres with self-tapping screws

## · STEEL WINDOWS, DOORS, ETC N.11

# N.11.1 Windows, doors, etc

All fittings to windows, doors, etc shall be chromium plated. Fixed lights and opening sashes shall be in single squares. Windows etc of single unit construction shall have weather bars at transoms above opening sashes

Composite windows not of single piece construction shall be coupled with standard coupling mullions and transoms that correspond with the window section used

Kicking plates and panels shall be 1,6mm metal plate fixed with standard metal glazing beads mitred at angles and countersunk screwed on at not exceeding 300mm centres with self-tapping screws

Except where described as galvanized, windows, doors, burglar bars, etc shall be primed as specified before leaving the factory

#### Burglar bars and flyscreens N.11.2

Where windows are described as fitted with burglar bars or flyscreens, these shall be standard type fitted over opening sashes

#### ADJUSTABLE LOUVRE UNITS N.12

)

Adjustable louvre units shall be suitable for hand or longarm operation

Louvre units shall include glass louvres with polished edges and installation, including holes, screws, rivets, preparation of openings, etc

## ALUMINIUM WINDOWS AND DOORS N.13

The foregoing preambles "N.4 - ALUMINIUM" shall apply to aluminium windows, doors, etc in all respects in so far as they are applicable. Aluminium windows and doors shall be manufactured from extruded aluminium members of 6063T6, 6261-T6 or 6082-T6 alloy and temper

Ancillary members such as sills, flashings, infill panels and the like formed from flat sheet material shall be of an appropriate alloy selected from 1200, 3004 or 5251 complying with BS 1470 of a temper suitable for the method of forming and a composition suitable for anodizing or painting as required

Windows, doors, etc shall be of an approved standard system, manufactured by an approved firm experienced in this type of work, and shall meet with the minimum recommended performance requirements as set out by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA) in the latest edition of the

The fittings for all opening sashes shall be substantial and, unless otherwise described, shall be of high quality aluminium alloy finished to match the windows, doors, etc on which they occur. Samples of all fittings shall be supplied to the Principal Agent for approval

Top, side and bottom hung opening sashes shall be hung on two aluminium hinges with 300 Series stainless steel pins, nylon bushes and stainless steel washers. Side hung sashes shall have fasteners and sliding stays, top hung sashes shall have peg stays and bottom hung sashes shall have spring catches and concealed arms

Projected out sashes shall have aluminium fasteners and concealed arms of a non-corrosive material compatible with aluminium

The frames which are to be built into openings in brickwork shall be fitted with the manufacturer's standard type fixing lugs, not less than 20 x 3 x 150mm long, screwed to frame and placed one near each corner and intermediately not more than 450mm apart to sides, top and bottom and where fixed to concrete reveals, wood sub-frames or to preformed openings in brickwork shall have countersunk holes for screws, one near each corner and intermediately not more than 450mm apart to sides, top and bottom

# N.13.1 Glazing beads

Where so described, openings and sashes of windows and doors shall be fitted with approved channel section aluminium glazing beads sufficient in size and profile to suit the method of glazing employed, finished to match the windows, doors, etc and neatly mitred. Screws where necessary shall be of aluminium or 300 Series stainless steel and have pan or raised heads finished to match the beads

## N.13.2 Finishes

Windows, doors, etc described as "anodized" shall be treated with Grade 25 coating thickness. Windows, doors, etc described as "factory painted" shall have an electrostatically applied oven baked polyester paint coating not less than 25 micrometres thick

#### N.13.3 General

Aluminium windows, doors, etc shall include glass as described, fixing in position, sealing and protection against damage, deterioration or discolouration by taping with removable tape or covering with temporary casings or motor oil and removing same on completion

## N.14 STRONGROOM AND RECORD ROOM DOORS

Strongroom and record room doors shall not be built in as the work proceeds, but shall be fixed later in the openings provided. The Contractor shall ensure that the lock or other important parts of the door are not tampered with. Should any such tampering occur, the Contractor will be held responsible and at the Principal Agent's discretion shall provide a new door or lock and keys at his own expense. The keys shall not be delivered together with the doors to the building site. The Contractor shall arrange for the manufacturer to send the keys direct to the Principal Agent per registered post. If these instructions are not complied with, a new lock and keys shall be provided by the Contractor at his own expense

## N.15 STEEL ROLLER SHUTTERS

Roller shutters shall be of approved manufacture comprising curtain, vertical channel guides and top mechanism. The curtain shall be constructed of 1mm thick machine-rolled galvanized interlocking slats with mild steel end locks spot welded to alternate strips. The bottom shall be provided with a galvanized rail riveted on and vertical edges shall slide in galvanized channel guides formed of steel not less than 2,5mm thick bolted to sides of openings

The mechanism shall be covered in a galvanized sheet iron box. The ungalvanized sections shall be primed as specified before leaving the factory

## O. PLASTERING

#### 0.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Common cement

SANS 50197-1(Class 32,5N)

Masonry cement

SANS 50413-1(Class 225X)

Limes for use in building

SANS 523 (Slaked (hydrated) limes)

Aggregates from natural sources – Fine aggregates for plaster and mortar

**SANS 1090** 

## O.2 PREPARATORY WORK

Surfaces shall be clean and free of oil and thoroughly wetted directly before any plastering or other in situ finishes are commenced. Concrete surfaces shall be slushed with a mixture of one part cement and one part coarse sand or otherwise treated to form a proper key. Preparatory coats shall be thoroughly scored and roughened to form a proper key

#### O.3 FINISH

All coats of paving and plastering shall be executed in one operation without any blemishes

#### O.4 SCREEDS

Screeds shall be composed of one part cement and four parts sand

#### O.5 CEMENT RENDER

Cement render shall be composed of one part cement and three parts sand finished with a steel trowel to a smooth polished surface and cured for at least seven days after laying

Cement render finish shall be divided into panels not exceeding 6m2 with V-joints and deep trowel cuts

## 0.6 GRANOLITHIC

Granolithic shall be composed of one part cement, one part fine sand, two parts coarse sand and one part granite or other approved stone aggregate that will pass through a 5mm sieve, finished with a steel trowel to a smooth polished surface and cured for at least seven days after laying

Coloured granolithic shall be carried out in two coats in one operation and shall be tinted to the required colour with approved colouring pigment mixed into the finishing coat. Under no circumstances is the pigment to be sprinkled on and trowelled in after the granolithic is laid

Granolithic shall be divided into panels not exceeding 6m<sup>2</sup> with V-joints and deep trowel cuts

## O.7 TERRAZZO

Terrazzo shall be applied in two coats. The undercoat shall be composed of one part cement and three parts sand and shall be finished with a wooden float. The finishing coat shall be composed of one part cement and two parts marble or stone aggregate of a colour and size to obtain the required colour and texture and shall be at least 12mm thick, and applied before the undercoat has dried out. The finishing coat shall be compacted by tamping or rolling until superfluous water has been expelled, finished with a steel trowel and cured for at least seven days after laying. The finished surface shall show at least 80% of the aggregate

Surfaces described as "polished" shall be polished by machine using various grades of abrasive and grouting with tinted cement as necessary between polishings

Surfaces described as "polished" shall be polished by machine using various grades of abrasive and grouting with tinted cement as necessary between polishings

Surfaces described as "brushed" shall be brushed with a steel wire brush on the day the terrazzo has been laid to expose the aggregate as required

Where required, brass or other dividing strips shall be embedded in the undercoat to finish flush with the finished surface

Three sample blocks, each size 300 x 300mm, as separately measured shall be prepared for approval by the Principal Agent and kept in an accessible place on the site until the completion of the contract

## O.8 SKIRTINGS

Skirtings shall not exceed 25mm thick and shall have a fair edge with arris or rounded external angle at top edge or V-joint to finish flush with plaster and coved or square junction with floor finish

## 0.9 THICKNESS OF PLASTER

All plaster, other than skim plaster, shall be not less than 10mm and not more than 20mm thick

#### O.10 CEMENT PLASTER

Cement plaster shall comply with the following table:

1	2	3
Plaster Class	Cement:sand (common cement)	Cement:sand (masonry cement)
	1:4 or 50kg to 130 litres	1:3 or 50kg to 100 litres
11	1:6 or 50kg to 200 litres	1:5 or 50kg to 170 litres
110	1:9 or 50kg to 300 litres	1:6 or 50kg to 200 litres

## 0.11 COMPO PLASTER

Compo plaster shall be composed of one part cement, two parts lime and nine parts sand

## O.12 GYPSUM SKIM PLASTER

Gypsum skim plaster shall be pure gypsum plaster finished with a steel trowel

## 0.13 TWO COAT PLASTER WITH GYPSUM FINISH

Two coat plaster with gypsum finish shall comprise an undercoat of Class II cement plaster finished with a wooden float and a finishing coat of gypsum skim plaster

## 0.14 ROUGH-CAST PLASTER

Rough-cast plaster shall be applied in two coats. The undercoat shall be composed of one part cement and five parts sand finished with a wooden float. The finishing coat shall be composed of one part cement and three parts stone aggregate that will pass through a 4mm sieve. The finishing coat shall be flicked on with a machine before the undercoat has set to obtain an even texture

## 0.15 FINE ROUGH-CAST PLASTER

Fine rough-cast plaster shall be as for rough-cast plaster but the finishing coat shall be composed of one part cement and three parts coarse sand

#### 0.16 GENERAL

Rates for plastering described as being on vertical surfaces of brickwork or blockwork shall include concrete columns, beams and lintels flush with the face of the wall

## P. TILING

## P.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Glazed ceramic wall tiles and fittings

**SANS 22** 

Ceramic wall and floor tiles

**SANS 1449** 

Common cement

SANS 50197-1(Class 32,5N)

Masonry cement

SANS 50413-1(Class 22,5X)

Aggregates from natural sources - Fine

aggregates for plaster and mortar

**SANS 1090** 

The design and installation of ceramic tiling

SANS 10107

## P.2 TILES, MOSAICS, ETC

Tiles, mosaics, etc shall be even in shape and size, free from cracks, twists or blemishes and uniform in colour

## P.3 PREPARATORY WORK

Surfaces shall be clean and free of oil and thoroughly wetted directly before any tiling is commenced. Concrete surfaces shall be slushed with a mixture of one part cement and one part coarse sand or otherwise treated to form a proper key

## P.4 CERAMIC WALL AND FLOOR TILING

Where tiles are fixed to plaster or screeds with an adhesive, the adhesive shall be as recommended by the manufacturer of the tiles. Joints shall be straight, continuous and flush pointed with an approved grouting compound

## P.5 GENERAL

Tiling described as "on walls" is on brick walls or block walls unless otherwise stated and shall include concrete columns, beams and lintels flush with the face of the wall

#### PLUMBING AND DRAINAGE Q.

#### MATERIALS AND WORKMANSHIP Q.1

Materials and workmanship shall comply with the following standards:

#### Sheet metal

BS 849 Sheet zinc

BS 1470 Sheet aluminium

BS 2870 Sheet copper

## Rainwater systems

Unplasticized poly(vinyl chloride) (PVC-U) components for external rainwater systems **SANS 11** 

## Pipes and fittings

Steel pipes: Pipes suitable for threading and of **SANS 62** 

nominal size not exceeding 150mm

Plain-ended solid drawn copper tubes for

Cast iron fittings for asbestos cement pressure pipes

**SANS 460** Potable water

Malleable cast iron fittings threaded to ISO 7-1 SANS 4

Polyethylene (PE) pipes for water supply -Specifications **SANS 4427** 

**SANS 546** 

**SANS 559** Vitrified clay sewer pipes and fittings

**SANS 676** Reinforced concrete pressure pipes

**SANS 677** Concrete non-pressure pipes

Cast iron pipes and pipe fittings for use above ground in drainage installations **SANS 746** 

Unplasticized poly(vinyl chloride) (PVC-U) sewer **SANS 791** and drain pipes and pipe fittings

Fibre-cement pipes, couplings and fittings for sewerage, drainage and low-pressure irrigation **SANS 819** 

Pitch-impregnated fibre pipes and fittings and jointing SANS 921

Unplasticized poly (vinyl chloride) (PVC-U)

SANS 966-1 pressure pipe systems

Unplasticized poly(vinyl chloride) (PVC-U) soil, **SANS 967** waste and vent pipes and pipe fittings

SANS 974-1 Rubber joint rings (non-cellular)

SANS 1067-1&2 Copper-based fittings for copper tubes

**SANS 1223** Fibre-cement pressure pipes and couplings

Polypropylene pressure pipes **SANS 1315** 

SANS 1321-1&2 Non-metallic waste traps

Vent valves for drainage installations **SANS 1532** 

Heavy duty cast iron pipe fittings for drainage **BS 78** and gas and water supplies

Fig. 7

4	Lead pipes	BS 602
	Cast iron pressure pipes for use in drainage and gas and water supplies	BS 1211
	Stainless steel pipes for use with compression fittings	BS 4127
	Sanitary fittings etc	
	Stainless steel sinks with draining boards (for domestic use)	SANS 242
	Stainless steel wash-hand basins and wash troughs	SANS 906
	Stainless steel sinks for institutional use	SANS 907
	Stainless steel stall urinals	SANS 924
	Acrylic sanitary ware : Baths	SANS 1402-1
	Glazed ceramic sanitary ware	SANS 497
	WC flushing cisterns	SANS 821
	Flush valves for WC flushing cisterns	SANS 1509
	Taps, valves etc	
	Water taps (metallic bodies)	SANS 226
	Water taps (plastic bodies)	SANS 1021
	Single control mixer taps	SANS 1480
	Float valves	SANS 752
	Plastic floats for ball valves	SANS 1006
	Functional control valves and safety valves for Domestic hot and cold water supply systems	SANS 198
	Cast iron gate valves for waterworks	SANS 664
	Automatic shut-off flush valves for water closets and urinals	SANS 1240
	Check valves (flanged and wafer types)	SANS 1551-1&2
	Fire extinguishers	
	Portable refillable fire extinguishers	SANS 1910
	Portable rechargeble fire extinguishers : Halogenated hydrocarbon type extinguishers	SANS 1151
	Water heaters and fire hose reels	
	Fixed electric storage water heaters	SANS 151
	Fire hose reels (with semi-rigid hose)	SANS 543
	Drainage covers, gratings, etc	
	Cast iron surface boxes and manhole and inspection covers and frames	SANS 558
	Cast iron gratings for gullies and stormwater drains	SANS 1115
	The installation of polyethylene and poly (vinyl chloride) (PVC-U and PVC-M) pipes	SANS 10112
	Water supply and drainage for buildings	SANS 10252-1&2

#### Q.2 GENERAL

#### Q.2.1 Excavations

Excavations shall be deemed to be in "earth". Backfilling to excavations shall be executed in 300mm thick layers, watered and compacted. Surplus excavated material shall be spread and levelled over site as directed

#### Q.2.2 Concrete

Unreinforced concrete shall be Class B prescribed mix concrete and reinforced and precast concrete shall be Class C prescribed mix concrete

#### Q.2.3 Brickwork

Brickwork shall be of extra hard burnt bricks built in Class I mortar

#### Q.2.4 Plaster

Plaster shall be 1:3 cement plaster finished smooth with a steel trowel. All angles shall be rounded

## Q.2.5 Diameters of pipes etc

Diameters stated for pipes, traps, valves, etc are internal diameters except PVC, polyethylene, stainless steel and copper pipes and traps for which external diameters are stated

## Q.3 SHEET METAL WORK

## Q.3.1 Galvanized sheet iron

Galvanized sheet iron shall be rolled steel sheet coated on both sides with Class Z275, unless otherwise specified, zinc coating complying with SANS 3575/4998. Sheets shall be free from white rust

## Q.4 EAVES GUTTERS

## Q.4.1 Galvanized sheet iron gutters

Galvanized sheet iron gutters shall have beaded edges and all joints shall be riveted and soldered. Angles shall be strengthened with 50 x 0,6mm galvanized sheet iron strips soldered on over the internal faces of mitres

Gutters shall be fixed with falls to outlets on 30 x 3mm galvanized mild steel brackets, bent to the shape of gutters, with front ends taken up to the underside of beaded edge of gutter and each screwed to roof timbers or bolted to fibre-cement fascias with 6mm galvanized gutter bolts. Gutters shall be bolted to brackets at front with 6mm galvanized gutter bolts, one to each bracket

Brackets shall be positioned at joints of gutters and intermediately at not exceeding 1,25m centres

## Q.4.2 Fibre-cement gutters

Fibre-cement gutters shall have spigot and socket joints. Gutters shall be fixed with falls to outlets on standard aluminium alloy brackets, screwed or bolted to roof timbers or fascias

## Q.4.3 Unplasticized polyvinyl chloride (UPVC) gutters

Gutters shall be fixed with falls to outlets on brackets as supplied by the manufacturer, screwed or bolted to roof timbers or fascias

## Q.4.4 Aluminium gutters

Aluminium gutters shall be roll formed on site to required lengths and profiles from 3003H14-3SH4 alloy strip not less than 0,7mm thick factory coated on both sides with baked enamel and two coats of silicone modified polyester to a total minimum thickness of 20 micrometres. Angles, stopped ends, etc shall be prefabricated units pop riveted to gutters with joints sealed with mastic. The guttering shall be in continuous lengths between angles, stopped ends, etc

## Q.5 RAINWATER PIPES

## Q.5.1 Galvanized sheet iron pipes

Galvanized sheet iron pipes shall have seams at the back and shall be jointed with soldered slip joints. Pipes shall be fixed to walls etc with galvanized mild steel holderbats spaced at not exceeding 2m centres with tails driven in or cut and pinned in 1:3 cement mortar

#### Q.5.2 Fibre-cement pipes

Fibre-cement pipes shall have spigot and socket joints. Pipes shall be fixed to walls etc with standard aluminium alloy holderbats with tails driven in or cut and pinned in 1:3 cement mortar

## Q.5.3 Unplasticized polyvinyl chloride (UPVC) pipes

Pipes shall be fixed to walls etc with patented UPVC or aluminium clips and holderbats as supplied by the manufacturer of the pipe

## Q.5.4 Aluminium pipes

Aluminium pipes and fixing straps shall be formed from 3003H14-3SH4 alloy strip not less than 0,7mm thick factory coated on both sides as described for aluminium gutters. Pipes shall be in continuous lengths with formed angles, offsets, shoes, etc. Pipes shall be fixed to walls etc with 20 x 0,6mm straps at not exceeding 1,5m centres screwed to 25 x 75 x 100mm hardwood chamfered and oiled blocks plugged to walls

## Q.6 STORMWATER CHANNELS

In-situ concrete stormwater channels shall be constructed of unreinforced concrete with segmental channel formed in top. Channels shall be laid to falls on a well rammed earth bottom and finished smooth on exposed surfaces

Precast concrete channels shall be of 25 MPa concrete, generally in 1m lengths, finished smooth from the mould on exposed surfaces, laid to falls on a well rammed earth bottom, jointed in 1:3 cement mortar and pointed with keyed joints

# Q.7 JOINTS

Q.8

Q.8.5

Fibre-cement

Joints of pipes not covered by SANS shall be as follows:

Joints of pipes r	not covered by SANS shall be as follows:	
Pipes		Joints
	concrete, pitch-impregnated fibre and ses for use under ground in non-pressure	Flexible joints in accordance with the manufacturer's instructions
Cast iron for use	e above ground	Spigot and socket joints with tarred rope yarn and caulking compound
		or
		Plain ended joints with stainless steel couplings with neoprene rubber sleeves
Cast iron for use below ground		Spigot and socket joints with tarred rope yarn and caulking compound
Galvanized mild steel		Joints of screwed galvanized steel sockets or bolted galvanized iron flanges
		Screwed joints with plastic jointing tape or hemp Flanged joints which shall be bolted and
		provided with rubber gaskets and with flanges screwed to pipes
Joints between follows:	pipes of different materials shall be as	
Between cast in	on and mild steel	Spigot and socket joints with tarred rope yarn and caulking compound
Between cast iron and clay		Spigot and socket joint with semi-dry cement caulking and 1:2 cement mortar fillet
Between mild steel or copper and clay		Spigot and socket joint with either bitumen or semi-dry cement caulking and 1:2 cement mortar fillet
FIXING OF PIP	ES	
Pipes shall be f	ixed as follows:	
Q.8.1 Galvar Q.8.3)	nized mild steel (except those stated in	To walls with galvanized mild steel brackets for pipes not exceeding 80mm diameter and with galvanized cast iron hinged holderbats with brass pins or bolts for pipes exceeding 80mm diameter; both types with tails cut and pinned in 1:3 cement mortar  To woodwork with screw-on type galvanized
Q.8.2 Coppe	r and stainless steel	mild steel holderbats To walls with brass holderbats or screw-on type two- piece spacing clips for pipes not exceeding 75mm diameter and with purpose made holderbats for pipes exceeding 75mm diameter; both types with tails cut and pinned in 1:3 cement mortar
	ron and galvanized mild steel for soil, waste ent pipes	To woodwork with screw-on type brass holderbats To walls with hinged cast iron holderbats with brass bolts and with tails cut and pinned in 1:3 cement mortar
		To woodwork with screw-on type galvanized mild steel holderbats
	hylene, polypropylene and patented UPVC lasticized polyvinyl chloride	To walls, woodwork, etc with aluminium clips and holderbats as supplied by the manufacturer of the pipes
0.05 54		To south with alcoming allow heatdachests with

To walls with aluminium alloy holderbats with tails cut and pinned in 1:3 cement mortar

#### Q.8.6 Pipes fixed to ceilings

Fixed with holderbats and standard or purpose made hangers, with extended hangers for pipes to falls

Method of sealing and fiving

#### Q.9 PIPES LAID IN GROUND

#### Q.9.1 Water pipes etc

Water pipes, gas pipes, etc laid in ground shall be at least 400mm deep from the crown of the pipe to the finished surface

#### Q92 Drain pipes

Excavations taken out too deep shall be filled in with selected soil and compacted. Backfilling to sides and up to 300mm above plastic pipes shall be free from stone or hard substances which will not pass a 10mm mesh

#### Q.10 CLEANING EYE LIDS

Pine fittings

Cleaning eye lids for drain pipe fittings shall be fixed and sealed as follows:

ripe illings	Method of Sealing and fixing			
Fibre-cement	Sealed with synthetic rubber or bituminou mastic packing and fixed with screws			
Vitrified clay	Polypropylene lid sealed with synthetic rubbe packing and pressed into position			
Polypropylene and unplasticized polyvinyl chloride	Sealed with synthetic rubber packing and screwed on or pressed into position			
Cast iron	Sealed with tallow or putty and fixed with non- ferrous metal screws			
Galvanized malieable cast iron and cast brass	Sealed with synthetic rubber packing and screwed in			

#### Q.11 CLEANING EYES

Cleaning eyes shall consist of cast iron frames and lids with letters "CE" (or "SO") cast in lids. The lids shall be secured with non-ferrous metal screws. Frames shall be jointed to vertical drain pipes. Cleaning eyes shall be encased in unreinforced concrete taken up to ground level and plastered on exposed surfaces

#### Q.12 INSPECTION EYE MARKER SLABS

Inspection eye marker slabs shall be  $350 \times 350 \times 50$ mm thick precast concrete finished smooth from the mould, with letters "IE" (or "IO") formed in top and placed flush in ground or paving

#### Q.13 GULLEYS

Gulleys shall be built up of traps, vertical piping and gulley heads with loose gratings, all encased in unreinforced concrete to finish flush with gulley head top and taken up to at least 50mm above surrounding finished surfaces. The outer top edge of the concrete encasing shall be splayed and the exposed surfaces plastered

#### Q.14 DISHED GULLEYS

)

Dished gulleys shall be built up of traps, vertical piping and gulley heads with loose gratings, all encased in unreinforced concrete and with dished unreinforced concrete hopper size 450 x 450mm overall around gulley head with rounded kerb 50mm wide to front and sides and 25mm wide at back, 100mm high above top of dishing and the hopper plastered on exposed surfaces. Top of hopper shall be taken up to at least 50mm above surrounding finished surfaces

#### Q.15 SUMPS, CATCHPITS, INSPECTION CHAMBERS, ETC

#### Q.15.1 Rainwater sumps

Rainwater sumps shall be built with half-brick sides on 100mm thick unreinforced concrete bottom, plastered internally on walls and with 80mm high unreinforced concrete kerb at top rebated for grating or cover and plastered on exposed surfaces

#### Q.15.2 Stormwater catchpits and inspection chambers

Brick catchpits and inspection chambers shall be built with one-brick sides on 150mm thick unreinforced concrete bottom projecting 100mm beyond walls all round, plastered internally on walls and with 100mm thick reinforced concrete cover slab with opening rebated for frame of grating or cover and plastered on exposed surfaces

Precast concrete catchpits and inspection chambers shall be constructed in accordance with the applicable details shown on Drawing LE-1 of SANS 1200LE. Precast concrete manhole sections and slabs shall comply with SANS 1294 and pipes shall be SC type and in accordance with SANS 677

#### Q.15.3 Sewer inspection chambers

Brick inspection chambers shall be built as for brick stormwater inspection chambers and with the bottom of the chamber well benched around half round channels, bends, junctions, etc up to sides of chamber in unreinforced concrete finished smooth

Precast concrete inspection chambers shall be constructed in accordance with the applicable details shown on Drawing LD-5 of SANS 1200LD. Precast concrete manhole sections and slabs shall comply with SANS 1294 and the pipes shall be SC type in accordance with SANS 677

#### Q.15.4 Stormwater drain junction boxes

Junction boxes shall be formed of 150mm thick unreinforced concrete bottom and sides to suit the various sizes of the drain pipes and built after the pipes have been laid, with the sides taken up slightly higher than the highest pipe and finished level on top for and covered with a 75mm thick loose precast concrete slab

#### Q.15.5 Step irons

Where inspection chambers exceed 1,2m deep, cast iron step irons shall be provided, built into the wall at 300mm centres and staggered regularly in vertical rows spaced at 200mm centres horizontally

#### Q.16 STOPCOCK AND METER BOXES

Stopcock and meter boxes shall be built with half-brick sides with a cast iron box and lid complying with SANS 558 set in 75mm wide unreinforced concrete kerb for the full depth of the cast iron box and plastered on exposed surfaces

#### Q.17 VALVE CHAMBERS

Valve chambers shall be built with half-brick sides with 100mm thick unreinforced concrete kerb to top with rebate for cover and frame to finish flush with adjacent paving or finished ground level and plastered on exposed surfaces

#### Q.18 CAST IRON COVERS, GRATINGS, ETC

All cast iron covers, gratings, frames and surface boxes shall be coated with preservative solution. Frames shall be cast into concrete. Covers, except covers to stormwater drainage or electrical cable inspection chambers, shall be set in grease

#### Q.19 CONCRETE ENCASING

Concrete encasing for pipes, bends, traps, gulleys, grease traps, etc shall be unreinforced concrete not less than 100mm thick all round

#### Q.20 SANITARY FITTINGS

#### Q.20.1 General

Glazed ceramic, acrylic and porcelain enamelled sanitary fittings and component parts shall be white. Accessories for sanitary fittings shall be chromium plated brass

Waste outlets for baths, basins, etc shall comprise chromium plated brass waste union with grating, rubber washers and locknut, fitted with rubber or vulcanite plug on a chromium plated brass chain and stay

#### Q.20.2 Stainless steel sanitary fittings

Stainless steel sinks and draining boards, basins, wash troughs and urinals shall be AISI Type 304 satin finished stainless steel. All stainless steel fittings shall be treated on the back with a vermin proof sound deadening coating. Sinks, basins and wash troughs shall be provided with 40mm diameter screwed waste outlets

#### Q.20.3 Precast concrete wash troughs

Reinforced precast concrete wash troughs shall have a sloping front with ribbed rubbing surface and shall be finished smooth on exposed faces with top edges and inner angles rounded. Each compartment shall be fitted with a 40mm diameter waste outlet. Wash troughs shall each be supported on two reinforced precast concrete pedestals finished smooth on exposed faces

#### Q.20.4 Steel baths

Steel baths shall be porcelain enamelled internally and painted externally and fitted with waste outlet and overflow grating with coupling

#### Q.20.5 Acrylic resinous baths

Acrylic resinous baths shall be fitted with waste outlet and overflow grating with coupling

#### Q.20.6 Acrylic resinous wash hand basins

Acrylic resinous wash hand basins and vanity units shall have a smooth high gloss finish, with outlet openings, soap recesses, tap-holes and integral overflow and shall be fitted with waste outlet and overflow grating with coupling

#### Q.20.7 Glazed ceramic sanitary fittings

Sinks shall be provided with integral weir overflows

Washdown closet pans shall have washdown action and be provided with smooth finished injection moulded polypropylene heavy duty double flap seats fixed with non-ferrous bofts. Urinal channels shall be provided with outlet gratings fitted in bitumen

#### Q.20.8 Flush and sparge pipes

Flush pipes for high level cisterns shall be of plastic or drawn galvanized steel

Flushpipes for low level cisterns shall be of plastic

Flush and sparge pipes for urinals with high level cisterns shall be of chromium plated copper piping and of the sizes recommended by the manufacturer of the urinal

#### Q.21 INSTALLATION OF SANITARY FITTINGS

Sanitary fittings shall be installed as follows:

#### Q.21.1 Precast concrete wash troughs

Precast concrete wash troughs shall be bedded on top of pedestals which shall be bedded on floors in 1:3 cement mortar

#### Q.21.2 Stainless steel wash troughs and wash hand basins

Stainless steel wash troughs and wash hand basins shall be fixed to walls on a pair of galvanized mild steel gallows brackets bolted to wall with 6mm diameter expanding bolts

#### Q.21.3 Acrylic resinous wash hand basins

Acrylic resinous wash hand basins shall be fixed to walls on a pair of standard painted cast iron brackets screwed to underside of basin and bolted to wall with 6mm diameter expanding bolts

#### Q.21.4 Ceramic wash hand basins

Ceramic wash hand basins shall be fixed to walls on a pair of standard painted steel or cast iron brackets bolted to wall with 6mm diameter expanding bolts

#### Q.21.5 Acrylic resinous baths

Acrylic resinous baths shall be bedded in 1:5 cement mortar on three cross rows of bricks or bedded solld on a layer of dry river sand and fixed to wall with galvanized steel brackets under edges (in the middle of the sides against walls) bolted to wall with 6mm diameter expanding bolts and sealed along top against wall finishes with patent mildew resistant silicone rubber

#### Q.21.6 Washdown closet pans and cisterns

Washdown closet pans shall be bedded on floors in 1:3 cement mortar. Cisterns shall be fixed to walls with 6mm diameter expanding bolts

#### Q.21.7 Ceramic urinals

Ceramic stall and slab urinals shall be bedded on floors and against walls in 1:3 cement mortar. Slabs, channels, treads, etc shall be jointed in 1:3 cement mortar and pointed in white cement

Ceramic bowl urinals shall be fixed to walls on standard steel brackets bolted to wall with 6mm diameter expanding bolts. Cisterns shall be fixed to walls on standard brackets bolted to wall with 6mm diameter expanding bolts

#### Q.21.8 Stainless steel urinals

Stainless steel stall and slab urinals shall be bedded on floors in 1:3 cement mortar and with backs and sides against walls filled in with fine unreinforced concrete. Cisterns shall be fixed as cisterns for ceramic urinals

#### Q.22 FIRE HOSE REELS

Fire hose reels shall each be fitted with a 30m long hose of internal diameter not less than 19mm with a 4,8mm internal diameter chromium plated brass nozzle

#### Q.23 FIRE EXTINGUISHERS

All fire extinguishers shall be fully charged

#### Q.24 TESTS

Sewerage pipe lines, sanitary plumbing including fittings and hot and cold water supply and fire service shall be tested to the approval of the Principal Agent and Local Authority

The Contractor shall provide all testing apparatus, material and labour required for the tests and inspections

#### R. **GLAZING**

#### R.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

SANS 50572-1 to 5 Glass in building

Glazing putty for wooden and metal window frames **SANS 680** 

Silvered glass mirrors for general use **SANS 1236** 

Safety and security glazing materials for buildings SANS 1263-1 to 3

Sealing compounds for the building industry, one

Component, silicone-rubber based **SANS 1305** 

The installation of glazing materials in buildings SANS 10137

Work on glass for glazing **SANS 1817** 

#### R.2 **PUTTY ETC**

Glazing putty shall be Type I for wooden sashes and Type II for steel sashes. Putty for glazing to unpainted hardwood shall be tinted to match the colour of the wood

Back putty shall not exceed 3mm thick. Putty shall not be painted until it has formed a surface crust, and if the putty does not form a surface crust it shall be replaced

Butyl putty shall be used where glass is to be fixed in aluminium sashes with glazing beads

Non-setting compounds shall be used where laminated glass is fixed in sashes with glazing beads

#### S. PAINTWORK

#### S.1 MATERIALS AND WORKMANSHIP

Materials and workmanship shall comply with the following standards:

Decorative paint for interior use SANS 515

Decorative high gloss enamel paints SANS 630

Primers for wood (for external work) SANS 678

Primers for wood (for internal work) SANS 678

Zinc phosphate primer for steel SANS 1319

Undercoats for paints (except emulsion paint) SANS 681

Aluminium paint SANS 682

Varnish for interior use SANS 887

Emulsion paints SANS 1586

Materials for paintwork shall be delivered to the site in unopened containers and applied in accordance with the manufacturer's instructions. Materials shall be suitable for application to the surfaces concerned. Undercoats shall be as

recommended by the manufacturer of the finishing coats

#### S.2 PREPARATORY WORK

#### S.2.1 Plastered surfaces etc

Plastered surfaces shall be thoroughly inspected and, if necessary, washed down and brushed in order to remove any traces of efflorescence and allowed to dry completely before any paint finish is applied. Before any paint is applied, holes, cracks and irregularities in plaster and other surfaces shall be filled with a suitable filler and finished smooth. Unfinished concrete surfaces shall have all projections rubbed off and shall be thoroughly cleaned with a spirits-of-salts solution (1 part concentrated spirits-of-salts to 4 parts water)

#### S.2.2 Metal surfaces

Metal surfaces shall be sanded, where necessary, washed with a suitable cleaning agent and left smooth

Protective coatings applied by manufacturers to galvanized metal surfaces shall be removed with a suitable agent and the surfaces washed down

Rust, grease and defective factory primers on metal surfaces, as well as pitch on cast iron pipes, shall be removed

#### S.2.3 Wood surfaces

Knots in woodwork shall be treated with knotting. Minor blemishes shall be filled with a suitable filler. Wood surfaces shall be sanded smooth

#### S.3 APPLICATION OF PAINT

Primers to wood surfaces shall be applied by brush. Primers to other surfaces may be applied by roller with the approval of the Principal Agent. Undercoats and finishing coats may be applied by brush or roller

Paint shall not be sprayed on except in the case of cellulose and other special paints where spray painting is the accepted method of application

Before subsequent coats of paint are applied the previous coat shall be properly dry and shall be sanded down where necessary

#### S.4 COLOUR SCHEME

A colour scheme comprising colours and the blending of colours approved by the Principal Agent shall be used for the paintwork. The tints of the undercoats shall closely match the finishing coat but nevertheless differ sufficiently to indicate the number of undercoats. Colour samples of the finishing coats shall be provided in all cases

#### S.5 GENERAL

Paintwork shall include the preparation of surfaces, filling, stopping, sanding and priming of nail heads and screws. Where windows, sashes, etc are to be painted, the rebates of the openings to be glazed shall be primed

#### T. PAPERHANGING

#### T.1 PREPARATORY WORK

Plaster surfaces to be papered shall be dry, thoroughly cleaned down, filled with a suitable filler as necessary to obtain a smooth surface and painted thereafter with a single coat of emulsion paint

Wood surfaces to be papered shall be knotted, stopped and sanded

#### T.2 PAPERHANGING

Wallpaper shall be hung in vertical long lengths. Vertical joints shall be close-fitted and plumb and the paper shall be tightly fitted to skirtings, ceilings, door frames, windows, etc. Horizontal joints will not be allowed

#### U. EXTERNAL WORKS

#### U.1 GENERAL

#### U.1.1 Excavations

Excavations shall be deemed to be in "earth"

#### U.2 LANDSCAPING

#### U.2.1 Topsoil

Topsoil shall vary between sandy loamy soil and sandy clayey soil with an ideal composition of 15% to 25% clay, 10% silt/sludge and 65% to 75% sand, with a minimum ratio of organic material of 2%. All material shall be free of harmful deposits as well as unwanted seeds

#### U.2.2 Compost

Compost shall be composed of properly decayed organic material, free from harmful deposits, salts, seeds and other waste material and shall have a pH of more than 4 and less than 7

#### U.2.3 Mulch

Mulch shall be approved organic material free from small particles of bark residue, fungus, disease, etc

#### U.2.4 Lime

Lime shall be agricultural lime of an approved manufacture

#### U.2.5 Fertilizer

Fertilizer shall be of the type specified, mixed thoroughly into the soil as prescribed. No fertilizer shall be added more than two weeks prior to planting

#### U.2.6 Backfilling

Backfilling in plant and tree holes shall be composed of two parts topsoil to one part compost mixed thoroughly together and compacted by foot in 100mm layers. Fertilizer shall only be added if prescribed

#### U.2.7 Pebbles

Pebbles shall be smooth with a uniform colour and form and ranging in size from 50mm to 75mm diameter. Removal of pebbles from river beds shall be done selectively to avoid any major disruption to the ecology of the river and environment

#### U.2.8 Plant material

#### U.2.8.1 General

All plant material (plants, shrubs, trees, etc) shall be obtained from a registered nursery and shall be free from damaged parts, parasites, fungus, other plant diseases or insects. No container-bound plants will be acceptable

#### U.2.8.2 Trees

The height of trees described in the bills of quantities shall be measured from the top of the root ball to the top of the tree. Where trees are pruned, such prune wounds shall not be more than 25mm in diameter and be sealed with an approved sealing compound

#### U.2.8.3 Shrubs and small plants

Shrubs and small plants shall meet the requirements for height and spread as specified. Thin or sparsely branched plants shall not be accepted. Branches shall be well spread with ample young branches and the plant as a whole shall be growing well

#### U.2.8.4 Groundcover

Groundcover shall be dense and healthy and shall comply with the minimum requirements for leaf density as specified Formal grass shall be planted as runners in 50mm deep drills at 150mm centres unless otherwise described

#### U.2.9 Cultivation and preparation of planting areas etc

All surface rocks and stones larger than 50mm shall be removed before commencing cultivation and preparation. The entire area shall be ripped and rotavated using approved machinery by breaking up the earth to a depth of 300mm at 600mm centres in both directions, unless otherwise described, and then levelled. Where fertilizer or compost is specified, it shall be worked into the topsoil after ripping and rotavation to a depth of 300mm and finished to final levels

All fertilizer to areas to be grassed shall be strewn on the final layer before final finishing is commenced and worked mechanically into the top 150mm soil

#### U.2.10 Planting procedure

Holes for shrubs and groundcover shall be as follows:

Shrubs - 500 x 500 x 500mm deep

Groundcover - 300 x 300 x 300mm deep (if not planted in drills)

Holes for trees shall be square, of adequate size to accommodate the root system and suitable for the height of the tree

All plant material shall be watered thoroughly before careful removal from the container and planted in the prescribed planting medium with the top of the soil in the container finishing level with the surrounding area. Water dams size 800mm diameter x 150mm deep and 500mm diameter x 150mm deep shall be formed around trees and shrubs respectively and all planting material shall be watered immediately after planting. Trees, shrubs, etc shall be properly staked or stayed, depending on their size, on the prevailing windy side with patent tree ties

#### U.2.11 Maintenance

All planted areas shall be maintained for a period of three months after practical completion as defined in the contract with the exception of hydroseeded areas which shall be maintained for 12 months after an acceptable cover has been obtained

This maintenance shall consist of keeping clear of weeds and litter, loosening soil where necessary every two weeks, replacing damaged, diseased or dead plants, pruning, cutting and mowing as necessary and watering so as to keep the plant material in a healthy growing condition

#### U.3 ROADWORK

#### U.3.1 Filling

Filling under roads etc shall be of inert material having a maximum plasticity index of 10, free from large stones etc spread, levelled, watered and compacted in layers not exceeding 200mm thick to a density of 98% Mod AASHTO

#### U.3.2 Preparation of sub-grade

The sub-grade shall be prepared by scarifying for a depth of 150mm and compacting to a density of 98% Mod. AASHTO, including trimming to the correct levels and grades

#### U.3.3 Base course

The base course shall consist of crusher run stone compacted to a density of 98% Mod. AASHTO and finished to the correct levels and grades

#### U.3.4 Weed killer

The completed sub-grade shall be treated with an approved total weed killer

#### U.3.5 Bituminous premix road surfacing

Before spreading the premix material, the base course shall be swept clean and free from all dust, dirt and loose particles, lightly wetted and sprayed with a prime coat of cutback bitumen complying with SANS 308 at the rate of 1 litre/m<sup>2</sup>

The material shall consist of semi-gap graded crushed stone aggregate having the following grading:

Sieve size (mm)	% By mass passing sieve
13,2	100
4,75	45-60
2,36	42-55
1,18	40-52
0,3	25-45
0.075	5-12

The aggregate shall be mixed with bituminous road tar binder complying with SANS 748 at the rate of 1m3 of stone to 120 litre of emulsion at atmospheric temperature

The binder shall be added to the stone and mixed until the stone is uniformly coated. Thereafter 5% of clean, dry quartzitic sand shall be added and mixed until evenly distributed through the mixture

The premix shall be applied only after the primer has dried out completely and shall be spread immediately after mixing and rolled on the same day

Spreading shall be done evenly over the prepared base course to a loose depth sufficient to ensure the consolidated thickness specified

Rolling shall commence as soon as the binder has set sufficiently, followed after three days by a final rolling

#### U.3.6 Precast concrete block road surfacing

Paving blocks shall be precast concrete blocks complying with SANS 1058

Blocks shall be laid to true levels and grades on and including a 25mm thick layer of river sand with joints exceeding 2mm and not exceeding 6mm wide

After laying, the paving shall be compacted by means of a vibrating plate compactor, with joints between the blocks filled in, after compaction, by sweeping in fine sand

Infill areas at edges of paving constituting less than 25% of a full block unit and of 25mm minimum dimension shall be filled with Class C prescribed mix unreinforced concrete with top surface trowelled smooth to match blocks. Smaller areas shall be filled with 1:4 cement mortar

#### U.3.7 Precast concrete kerbs and channels

Precast concrete kerbs and channels shall comply with SANS 927, generally in 1m lengths and finished smooth from the mould on exposed surfaces. Kerbs and channels shall be bedded on and jointed in 1:3 cement mortar and pointed with keyed joints. Bases to kerbs shall be Class B prescribed mix unreinforced concrete

#### U.3.8 Process control tests

The Contractor shall be responsible for carrying out all necessary process control tests on the density and moisture content of the compacted sub-grade, base course, etc to ensure that the required compaction is being attained

#### U.4 FENCING ETC

#### U.4.i Materials

Materials and workmanship shall comply with the following specifications and requirements:

Wooden poles, droppers, guardrail posts

and spacer blocks

SANS 457-2&3

Zinc-coated fencing wire

**SANS 675** 

Prefabricated concrete components

for fencing

**SANS 1372** 

Chain-link fencing and its wire accessories

**SANS 1373** 

Fasteners SANS 1700

Anti-intruder fences CKS 451

Metal droppers and standards CKS 451

#### U.4.2 Galvanized wire

All galvanized wire shall be zinc coated wire with Class B zinc coating. Straining wire shall be 4mm diameter galvanized mild steel wire. Tie wire shall be 1,6mm diameter galvanized mild steel wire

#### U.4.3 Plastic coated wire

Plastic coated straining wire shall be 3,15mm diameter Class C galvanized mild steel wire plastic coated to an overall diameter of 3,95mm

Plastic coated tie wire shall be 1,8mm diameter Class C galvanized mild steel wire plastic coated to an overall diameter of 2,5mm

#### U.4.4 Galvanized barbed wire

Galvanized barbed wire shall be 2,5mm diameter mild steel double strand reverse twist zinc coated barbed wire with Class A zinc coating

#### U.4.5 Galvanized wire mesh

Galvanized wire mesh shall be 50mm mesh chain link netting of 2,5mm diameter Class C galvanized mild steel wire

#### U.4.6 Plastic coated wire mesh

Plastic coated wire mesh shall be 50mm mesh chain link netting of 2,5mm diameter Class C galvanized mild steel wire plastic coated to an overall diameter of 3,25mm

#### U.4.7 Galvanized welded wire mesh

Galvanized welded wire mesh shall be fabricated from pre-galvanized wires to rectangular pattern welded together at each intersection using a welding method which forms a zinc oxide protective coating at each intersection

#### U.4.8 Razor wire

Razor wire shall be fabricated from 2,5mm diameter galvanized high tensile steel wire fitted with razor barbs formed of 0,5mm galvanized steel strip clipped on at 37,5mm centres

#### U.4.9 Metal droppers and standards

Droppers shall be of ridged T-section mild steel with a mass of not less than 0,55kg/m. Standards shall be of I- section mild steel with a mass of not less than 3kg/m or of ridged edge Y-section mild steel with a mass of not less than 2,5kg/m, and shall be driven 600mm deep into the ground

Droppers and standards shall have either galvanized, sprayed metal or painted finish as described in the items and in accordance with CKS 451. In addition, those surfaces of standards embedded in the ground shall be coated with bitumen

#### U.4.10 Metal posts and stays

1

Posts and stays shall comply with CKS 451 and shall be of black galvanized mild steel tubing as specified

Straining posts shall be of 108mm outside diameter x 3mm wall thickness tubing, each with a 300 x 300 x 5mm thick mild steel sole plate and a steel cap welded on

Intermediate posts shall be of 50mm outside diameter x 2,5mm wall thickness tubing, each with a 230 x 230 x 5mm thick mild steel sole plate and a steel cap welded on

Stays for straining posts shall be of 50mm outside diameter x 2,5mm wall thickness tubing, each with a 230 x 230 x 5mm thick mild steel sole plate welded on and fixed raking with top end flattened, bent, holed and bolted to straining post with and including a 5mm diameter galvanized mild steel bolt with nut and washer

Posts and stays shall have either galvanized or painted finish as described in the items and in accordance with CKS 451. In addition, sole plates and portions of posts and stays embedded in ground shall be coated with bitumen

#### U.4.11 Timber posts, stays and droppers

Timber posts shall be 125mm diameter, timber stays shall be 100mm diameter and timber droppers shall be 30mm diameter

#### U.4.12 Prestressed concrete posts and stays

Prestressed concrete posts and stays shall be finished smooth from the mould and uniformly stressed by means of high tensile longitudinal prestressing wires with concrete cover to wires of not less than 20mm

Corner and straining posts shall be  $100 \times 100$ mm and intermediate posts and stays shall be  $75 \times 75$ mm. Stays shall be fixed raking with top end splayed and glued to posts with a suitable epoxy compound

#### U.4.13 Bolts, nuts and washers

Straining eye bolts, hinge bolts, bolts, nuts and washers shall be galvanized

#### U.4.14 Precast concrete fencing

Precast concrete fencing over sloping terrain shall be stepped to suit terrain, including the use of increased lengths of posts as necessary, excavation, etc

#### U.4.15 Concrete bases

Bases in ground for posts, stays, etc shall be of Class B prescribed mix concrete with tops 100mm below surface of ground

Sizes of concrete bases for posts, stays, etc shall be as follows:

Straining and gate posts – 450 x 450 x 700mm deep

Intermediate posts – 300 x 300 x 600mm deep

Stays – 600 x 300 x 500mm deep

#### U.4.16 Security overhangs

Where fencing is described as having a security overhang, the posts and standards shall have angular (single arm) extension arms

Extension arms shall be attached to the posts and standards by welding in the case of steel and by spiking in the case of timber

Concrete extension arms shall be cast integrally with the post or standard

Barbed wire to security overhangs shall be tightly strained and wired at each intersection with extension arms and shall have barbed wire braces at 450mm centres between standards, posts, etc wired onto the barbed wire and the top straining wire

#### U.4.17 Gates

Gates shall be formed of 40mm outside diameter x 2,5mm wall thickness mild steel tubular framework with welded joints, strongly braced as necessary and filled in with wire mesh as described above, properly strained and securely bound to framework with tie wire



## public works

Department:
Public Works
PROVINCE OF KWAZULU-NATAL

# Occupational Health and Safety Specification (OHSE SPEC)

Project Name

: Nongoma District Office Replacement of Perimeter

Fence

WIMS no.

: 071206/0001

Region

: North Coast Region

District

: Nongoma

#### TABLE OF CONTENTS

- 1. Introduction
- 2. Definitions
- 3. Scope of application
- 4. Contractual Issues
- 5. Administrative Requirement
  - 5.1 Notification of Construction Work
- 6. Appointment of Safety Officers
- 7. Annexures
  - i. Annexure A Structure of the detailed OHSE Plan
  - ii. Annexure B Client Specific Legal Requirements
  - iii. Annexure C OHS Declaration for Tenders
- iv. Annexure D Baseline Risk Assessment

#### 1. Introduction

The KwaZulu Natal Department of Public Works is deemed as the "Client" in terms of the definitions of Construction Regulations of 2014 as published in Government Gazette No. 37305. The Construction Regulations of 2014 under CR(5)(1) stipulates that the client must prepare a suitable, sufficiently documented and coherent site specific Occupational Health and Safety Specification for the intended construction work based on the baseline risk assessment.

The purpose of this Occupational Health and Safety Specification document (which hereinafter will be referred to as OHSE Spec) is to provide designers and the successful tenderer with essential OHS information to ensure effective safety management during the design and construction phase of the project.

This OHSE Spec forms an integral part of the contract between the Client and the Principal Contractor, so as to ensure compliance with the Occupational Health and Safety Act, Act 85 of 1993 and its applicable regulations and must serve as the basis for the Principal Contractor to develop his/her Project Safety, Health and Environmental Management Plan. As with any other plan for it to be implemented and managed effectively it requires the allocation of sufficient funds to achieve the objectives set out in the plan. In line with this requirement Construction Regulation 5(1)(g) requires the Client to ensure that the Principal Contractor has made adequate provisions for the cost of Health and Safety Measures in their tenders.

It must be noted that this OHSE Spec as much as it is detailed it is not exhaustive and the onus is on the Principal Contractors to ensure that they comply with Section 8 of the OHS Act, Act 85 of 1993 which states that "Every Employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of his employees." this means that Principal Contractors as they are employers in their own right must at all times ensure continuous assessments are done for continued provision and maintenance of a healthy and safe working environment.

### 2. Definitions

For the purpose of the OHSE Spec, the abbreviations or definitions given hereunder shall apply and the reference to on gender will also apply to the other gender.

"CR" refers to the Construction Regulations 2014

"Agent (Pr.CHSA)" means a competent person who acts as a representative for a Client in terms of regulation (5)5.

"Client" means Department of Public Works

"Competent person" means a person who-

- (a) Has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific for that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No.67 of 2000), those qualifications and training must be regarded as the required qualifications and training; and
- (b) Is familiar with the OHS Act, Act 85 of 1993 and with the applicable regulations made under the Act;

"Construction Manager (Site Agent)" 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;

"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 -

- (a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- (b) 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, plling, or any similar civil engineering structure or type of work;

"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;

"Fall Protection Plan" means a documented plan, which includes and provides for-

- (a) All risks relating to working from a fall risk position, considering the nature of work undertaken;
- (b) The procedures and methods to be applied in order to eliminate the risk of falling;
   and
- (c) A rescue plan and procedures;

"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 client'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;

"Medical Certificate of Fitness" means a certificate contemplated in regulation 7(8) of Construction Regulations 2014;

"Principal Contractor" means an employer appointed by the client to perform construction work;

"Safety Officer" – a person deemed competent by SACPCMP under the relevant category of registration.

"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);

## 3. Scope of Application

( )

This OHSE Specification document stipulates the minimum Occupational Health, Safety, and Environmental requirements that the tenderer need to address in his/her OHSE Plan. This Specification also addresses legal compliance, hazard identification, risk assessment, risk control, and the promotion of a Health and Safety culture amongst those working on the project. This Specification also makes provision for the protection of persons other than employees. This OHSE Spec is exclusively applicable to the following project pending any change of scope which may necessitate changes to the OHSE Specification;

Nongoma District Office: Replacing existing Fence with Clear View

## This OHSE Specification further seeks to achieve the following;

- a) To provide Principal Contractors with the Structure of the Detailed OHSE Plans they will have to prepare and submit for this project. See Annexure A
- b) Provide the overarching framework within which the Principal Contractor is required to demonstrate compliance with certain requirements for occupational health and safety established by the Occupational Health and Safety Act, Act 85 of 1993, all applicable regulations and Client Specific Requirements. See Annexure B

- c) To bring to the attention of the Bidding Principal Contractors that they need to make an undertaking that the costs for executing the project includes the costs of complying with the OHS Act, Act 85 of 1993, all applicable regulations including Client Specific requirements. Such undertaking is made by appending signatures on the OHS Declaration for Tenders. See Annexure C
- d) Ensure that the Principal Agent as the Professional Service Provider appointed by the Department to manage the project on its behalf in terms of the Conditions of Contract applicable to this project ensures that the contents of this document and the attached Baseline Risk Assessment are taken into consideration during design by all professionals appointed and that the OHSE Specification is incorporated into the tender documents. See Annexure D

#### 4. Contractual Issues

Acceptance by the Principal Contractor of the contract with KZN DOPW shall constitute acknowledgement that the Principal Contractor has familiarised him/herself with the contents of the OHSE Spec and that he/she will comply with all its obligations in respect thereof.

Due to fact that this document is based on legislative requirements, the Client requires that all Contractors comply with the requirements of this document and all other relevant legislative requirements not covered by this document.

The Client or its duly appointed Construction H&S Agent reserves the right to stop any Principal Contractor or Sub-Contractors from working whenever Safety, Health or Environmental requirements are being violated as required by regulation 5(1)(q). Any resultant costs of such work stoppages will be for the relevant Contractor's account.

The requirements as specified by the Client in this document must not be deemed to be exhaustive and the Client reserves the right to make changes as and when the Client deems flt to address issue of OHSE Compliance.

The Client will not entertain any claim of any nature whatsoever which arises as a result of costs incurred or delays being experienced due to the Contractor not complying with the requirements of this document and/or any other applicable legislative requirements imposed on the Contractor.

## 5. Administrative Requirements

i )

#### 5.2 Notification of Construction Work

The successful tenderer must at least within 07 working days before commencing with construction work notify the Provincial Director in writing using Annexure "2". A copy of the notification once stamped by a DoL Official must be submitted to the client prior to commencing with construction work.

## 6. Appointment of a Part time Safety officer

The Principal Contractors will have to appoint a competent Construction H&S Officer as per the following criteria;

> Part Time Safety Officer shall be appointed and will be onsite at least 2 days a month

Further to the above criteria, should the Client or its Representative having considered the risks present and lack of compliance to the Occupational Health and Safety Act, Act 85 of 1993 and its applicable Regulations the Client or its Representative may issue an instruction that a Part/ Full Time Construction Health and Safety Officer must be appointed, such a requirement will have to be met.

## Annexure A

## Structure of the Detailed OHSE Plan

A detailed OHSE Plan is to be submitted by the successful tenderer as per section 3 (a) above. The following are the minimum standard legal documentation that must form part of the OHSE Plan based on the risks attached in executing this project —

# Nongoma District Office: Replacing existing Fence with Clear View

- 1. The notification to commence with construction work made to the Provincial Director of Labour using Annexure 2. (Filled in only to be submitted on approval of the Safety Plan)
- 2. Letter of Good Standing with Compensation Commissioner or Compensation insurer
- 3. The Contractor's Health, Safety & Environmental Policy, signed by the chief executive officer, which outlines the Contractor's OHSE compliance objectives and how they will be achleved.
  - 4. Pre-Construction risk assessment (Site specific)
  - 5. Relevant checklists and registers.

 $(\cdot)$ 

- 6. Site specific OHSE Organogram
- 7. Preliminary Induction Program
- 8. Environmental Management Plan
- 9. Public Safety Management Plan
- 10. Proof of competency for the following legal appointees;
  - Construction Manager (Detailed CV reflecting qualification, relevant experience and references from previous clients) 10.1.
  - Construction Work Supervisor (Detailed CV reflecting qualification, relevant experience and references from previous clients) 10.2.
    - Construction H&S Officer SAMTRAC or equivalent
    - Risk Assessor SAMTRAC or equivalent 10.3.
    - Accident Investigator SAMTRAC or equivalent 10.4. 10.5
    - Fall Protection Planner SAMTRAC or equivalent 10.6.
    - Electrician wireman's licence 10.7.

Legal appointmen	
Prior Site Handover  16.2 Construction Manager Assistant Construction Manager Construction Work Supervisor Construction H&S Officer Risk Assessor Fall protection Planner	After Site Handover on commencement with Construction work  Excavation work supervisor First Aiders Emergency co-ordinator Fire Marshalls Fire team members Portable Electrical tool inspector Hand tools inspector Housekeeping inspector Stacking and storage inspector Construction Vehicle and mobile plant inspector Temporary electrical installation inspector Temporary works inspector Flammable liquids Storage Inspector Hazardous substance storage inspector Ladder inspector Health and safety representatives Accident investigator

## Annexure B

## **Client Specific Requirements**

items	Client Specific Requirements					
Site Office location	<ul> <li>The location of the site office should be in an area that will not require visitors to pass through or enter area where construction work is active and will not require the re-location of the office as the project progresses.</li> </ul>					
Medical Certificates	In compliance with the requirements of the Construction Regulations 2014 section 7(8) the Contractor must ensure that all of his employee's onsite 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.					
Appointment of a Part-time safety officer	<ul> <li>The Principal Contractors will have to appoint a competent Construction H&amp;S Officer for this project and the safety officer will have to be onsite twice a month for the whole duration of this project.</li> </ul>					
Extreme weather conditions	<ul> <li>If the weather condition poses a threat to the health &amp; safety of employees be it extreme heat, cold, lighting or any adverse weather condition appropriate safety measures have to be taken.</li> </ul>					
Change to scope of work	<ul> <li>Should there be changes to the original scope of work, the Principal Agent must inform appointed Construction Health and Safety Agent to effect changes to the OHSE Specification.</li> </ul>					
Safety Plan Submission	<ul> <li>The successful Tenderer must submit a copy of the detailed OHSE Plan for approval and keep the original for onsite use during construction. The principal Contractor will not be allowed to start site establishment before his/her SHE Plan has been approved in writing.</li> </ul>					
Bylaws	<ul> <li>The Principal Contractor must incorporate any aspects of the Local Municipal bylaws which affect the, Safety and Environmental wellbeing of the employees and the public into his/her OHSE Plan and ensure compliance to such bylaws.</li> </ul>					
Risk assessment for construction work	<ul> <li>To comply with CR(9) and to also address environmental issues</li> <li>To also include exposure to hazardous gases         See the attached baseline risk assessment to be considered by both the designer and the principal contractor.</li> <li>Issue a Baseline and Continuous Risk Assessment</li> </ul>					
Occupational Hygiene and infection control	<ul> <li>Occupational exposure to biological agents is a present risk to this project and the contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards.</li> <li>Contractors must prevent inhalation, ingestion and absorption of any harmful chemical or biological agents.</li> </ul>					

}	<ul> <li>Appropriate PPE to be used when working in the sewers</li> <li>Hazardous materials such as asbestos may not be included in general rubble and need to be disposed of as per applicable legislative requirements</li> </ul>
all protection	<ul> <li>To comply with CR (10),</li> <li>Edge protection and protection of floor openings need to be of such a manner as to properly protect employees from falling off elevated positions or falling into floor openings</li> </ul>
Excavations	<ul> <li>To comply with CR(13) and the following;</li> <li>If the risk exists of a person in an excavation being enclosed in an event of a collapse the following will apply; shoring sufficient to prevent enclosure, any excavated material must be placed at least 1metre from the edge and at the maximum angle of repose to the horizontal.</li> <li>No excavation may affect the stability of any adjoining structure or road unless steps have been taken as identified by an Engineer or a Technologist.</li> <li>Adequate provisions must be made to ensure that water is drained from excavations where water may enter such excavations as a result of seepage or rain</li> <li>All excavations made by the Principal or Sub Contractors must be barricaded by means of solid barricading and barricading tape may only be used to make such barricading more visible</li> </ul>
Construction vehicles and mobile plant	To comply with CR (23) and the following;
Electrical Installations and machinery on construction sites	<ul> <li>To comply with CR (24)</li> </ul>
Use and temporary storage of flammable liquids on construction sites	• To comply with CR (25)
Housekeeping and general safeguarding on construction sites	<ul> <li>To comply with CR (27) and the following;</li> <li>Contractor to designate areas for placing refuse and rubble prior to being removed from site</li> <li>Contractor must implement a dally task site clean-up for all activities these should cover work areas, stairways, walkways etc. to free of any construction debris obstruction.</li> <li>Refuse to be separated for recycling purposes</li> </ul>
Stacking and storage on construction sites	• To comply with CR (28)
Fire precautions on construction sites	<ul> <li>To comply with CR (29) and the following;</li> <li>No smoking may be permitted on site except in designated smoking areas</li> </ul>

<b>\$</b>	
Construction employees' facilities	<ul> <li>To comply with CR (30) and the following;</li> <li>Gender signs to be placed at appropriate locations</li> <li>All welfare facilities to be kept in a hygienic condition at all times</li> <li>Employees to be trained in good hygiene practices</li> </ul>
Public Safety & Signage	<ul> <li>The Principal Contractor engaged in construction work must ensure that each person working on or visiting a site, and the general public in the vicinity of the construction site, shall be made aware of the dangers likely to arise from onsite activities and the precautions to be observed to avoid or minimise those dangers.</li> <li>Appropriate signage shall be posted at conspicuous points within and around the perimeter of the site. The steps to comply with this requirement must be outlined in the OHSE Plan.</li> <li>The public or visitors may only be permitted on site if they go through an appropriate 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</li> <li>The entire project site must be secured against unauthorized access and provided with appropriate warning signage. Where roadways or walkways must be encroached or closed due to work, adequate barriers shall be installed to safely redirect the flow of vehicles and pedestrians and protect them from construction activities.</li> <li>Whenever it is necessary to maintain public use of work areas (such as sidewalks, ramps, entrances to buildings, corridors, or stairways), the public shall be protected with appropriate guardrails, barricades, temporary fences, overhead protection, or temporary partitions and hoarding. The public must also be adequately protected from any work created hazards, such as excavations. Appropriate warnings, signs, warning lights and instructional safety signs shall be conspicuously posted and placed where necessary.</li> <li>The public must also be protected from falling debris and objects from the project site. Overhead protection shall be provided that will fully protect the public and be capable of withstanding the maximum forces that could be applied from potential falling objects. Special attention shall also be given to developing adequate means to protect against wind-blown debris and construction-rela</li></ul>
On Site Health and Safety Training & Induction	<ul> <li>The Principal Contractor shall ensure that all site personnel and visitors undergo a risk-specific health &amp; safety induction training session before starting work or being permitted to enter the site. A record of attendance shall be kept in the health &amp; safety file.</li> <li>The Principal Contractor shall ensure that, on site periodic toolbox talks take place at least once per week. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the health &amp; safety file. The above should also cover all subcontractors that are onsite.</li> </ul>
	All Contractors have to comply with this minimum requirement Environmental issues to be included in toolbox talks where required.
General Record Keeping	<ul> <li>The Principal Contractor and all Sub Contractors must keep and maintain Health and Safety records to demonstrate compliance with this Specification, The OHS Act 85/1993; and with the Construction Regulations of 2014. The Principal Contractor shall ensure that all</li> </ul>

	records of Incidents/accidents, training, inspections; audits, etc. are kept in a health & safety file held in the site office, which must be present on site at all times.  The Principal Contractor must ensure that every Sub Contractor opens its own health & safety file, maintains the file and makes it available on request.		
ealth & Safety audits, Monitoring nd reporting	• The Client or its duly appointed Agent shall conduct monthly health & safety audits. The Principal Contractor is obligated to conduct similar audits on all Sub Contractors appointed by them at least once a month Detailed audit reports must be presented and discussed at all levels of project management meetings and a copy of such audit will be provid to the Client or its duly appointed Agent within 7 working days of such audit. Coples of the Client's audit reports shall be kept in the Principal Contractors Health & Safety File.		
Emergency Procedures	<ul> <li>The Principal Contractor shall submit a detailed Emergency Plan for approval by the Client prior to commencement on site. The plan shall detail the response procedure including the following key elements:</li> <li>1. List of key competent personnel;</li> <li>2. Details of emergency services;</li> <li>3. Actions or steps to be taken in the event of the specific types of emergencies;</li> <li>4. Information on hazardous material/situations.</li> </ul>		
First Aid Boxes and First Aid Equipment	The appointed First Aider(s) to be in possession of a valid first aid training certificate Level 2. Valid certificates are to be kept in the Site Safety File. All Sub Contractors with more than 5 employees shall supply their own first aid box, except if otherwise agreed upon between Principal and Sub- Contractor in writing.		
Accident / Incident Reporting and Investigation	<ul> <li>Injuries are to be categorised into Near miss, first aid, LTI, fatal etc. Fatal accidents to be reported in addition to applicable legislative requirements to the Client or its duly appointed Agent with immediate effect. The Principal Contractor must stipulate in its construction phase OHSE Plan how it will handle each of these categories. When reporting injuries to the Client, these categories shall be used. The Principal Contractor shall investigate all injuries, with a report being forwarded to the Client immediately. All Sub- Contractors have to report on the abovementioned categories of injuries to the Principal Contractor at least monthly. All categories of incidents/accidents must be in the Statistics Section of the Monthly Audit Reports, submitted to the Client or it's duly appointed Agent.</li> </ul>		
Hazards and Potential Situations	<ul> <li>The Principal Contractor shall immediately notify other Sub Contractors as well as the Client of any hazardous or potentially hazardous situation that may arise during performance of construction activities.</li> <li>Should a hazardous situation require work stoppages, the work must be stopped and corrective steps taken such as the issue of Written Safe Work Procedures and the issue of Personal Protective Equipment.</li> </ul>		

Personal Protective Equipment (PPE) and Clothing	<ul> <li>The Principal Contractor must ensure that all workers are issued with the required PPE as required by the risks associated with the activities they perform .The minimum PPE to be worn on site will be Safety Shoes/Boots, Hard Hats, Overalls and reflective vests. No Visitors may enter the site without Safety Shoes/Boots and Hard hats. The Principal Contractor and all Sub Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. All employees issued with PPE to be trained in correct use, records of training and issue to be kept in the Site SHE File .Procedure to be in place to deal with:         <ol> <li>Lost or stolen PPE;</li> <li>Worn out or damaged PPE replacement.</li> <li>Employees not utilising PPE as required</li> <li>The above procedure applies to Principal Contractors and their appointed Sub- Contractors, as they are all employers in their own right.</li> </ol> </li> </ul>				
Permits	<ol> <li>The Principal Contractor shall prepare and issue the required written permits relating to but not limited to the following:         <ul> <li>Hot Work</li> <li>Roof Work; and</li> <li>Electrical work (both temporary and permanent)</li> </ul> </li> <li>The Principal Contractor must ensure that where permits are required that they are properly implemented and adhered to.</li> </ol>				
Speed Restrictions and Protections	<ul> <li>Unless otherwise stipulated, the maximum speed limit on sites must be limited to 10 km/h.</li> <li>1) Vehicle movement routes on site must be clearly indicated where applicable.</li> <li>2) Signage to ensure the safe movement of vehicles on site, as well as to ensure the health and safety of all employees and visitors on site, must be displayed in strategic locations.</li> </ul>				
Hazardous Chemical Substances (HCS)	<ol> <li>To comply with Hazardous Chemical Substances Regulations as published in Government Notice No. R. 1179 dated 25 August 1995.</li> <li>In addition to the abovementioned, Material Safety Data Sheets must be kept on site for all materials, which may contain hazardous chemical substances</li> </ol>				
Fire Extingulshers and Fire Fighting Equipment	<ol> <li>The Principal Contractor and Sub-Contractors must allow for and provide adequate provision of regularly serviced temporary fire fighting equipment located at strategic points on site, specific for the classes of fire likely to occur.</li> <li>The appropriate notices and signs must be allowed for and be erected as required</li> <li>Contractors may not utilize fire protection equipment belonging to the Client without prior consent</li> </ol>				
Ladders and Ladder Work	<ol> <li>The Principal Contractor must allow for and ensure that all ladders are inspected at least monthly, are in a good safe working order, are the correct height for the task, extend at least 1m above the landing, are fastened and secured and are placed at a safe angle.</li> <li>Records of inspections must be kept in a register on site.</li> </ol>				

Beneral Machinery	To comply with Driven Machinery Regulations as published in Government Notice No. R. 1010 dated 18 July 2003
Portable Electrical Fools and Hand Tools	<ol> <li>The Principal Contractor shall ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in a safe working order.</li> <li>The Principal Contractor shall ensure that all portable electrical Equipment, is clearly numbered, inspected by a Competent appointed person and records of such inspections to be kept on record in an appropriate register on the site SHE file</li> <li>The Principal Contractor shall allow for and ensure the following in relation to hand Tools:</li> <li>That a "Competent Person" undertakes routine inspections and records are kept on site.</li> <li>That only authorized trained persons use the tools.</li> <li>That safe working procedures apply.</li> <li>That PPE is provided and used.</li> </ol>
Adequate Lighting	All Contractors must allow for and ensure that adequate lighting is provided to allow for work to be carried out safely.
Transportation of Workers	<ol> <li>In addition to CR 23 the following will apply         The Principal Contractor and Sub-Contractors shall not:         <ul> <li>Transport persons together with goods or tools unless there is an appropriate area or section of the vehicle in which to store such goods.</li> <li>Transport persons on the back of trucks except if a proper canopy (properly covering the sides and top) has been provided with suitable seating areas.</li> <li>Permit workers to stand or sit on the edge of the transporting vehicle.</li> <li>Transport workers in LDVs unless they are closed/covered and have the correct number of seats for the passengers</li> <li>No driver may transport more than six people on the back of a 1 Ton LDV and more than four passengers on the back of a ½ Ton LDV.</li> </ul> </li> <li>The driver of any LDV may not permit more than two passengers to occupy the cab of any LDV.</li> <li>Drivers of such vehicles must have a valid driver's license for the code of vehicle being driven by them.</li> <li>No servicing of vehicles will be permitted on a Construction Site.No Vehicles or machinery leaking oil will be permitted on site due to the risk posed to the environment.</li> <li>Any oil or diesel spilled on site must be cleaned up as per accepted environmental practice</li> </ol>
	<ul> <li>In the event that Earth Moving Machinery is present on site the following must be adhered to:         <ul> <li>Drivers of vehicles must be instructed to avoid parking behind earth moving machinery in order to ensure that their vehicles are visible to the operators of earth moving machinery.</li> <li>Right of way must be afforded to earth moving machinery at all times.</li> <li>Vehicles must only be permitted to park, where possible, in designated areas</li> </ul> </li> </ul>

i )

	Occupational exposure is a major problem and all Contractors must  place to prevent  place to prevent
Occupational Hygiene  Environmental	ensure that proper health and hygiene measures to these hazards.  2) All Contractors must prevent inhalation, ingestion and absorption of any harmful chemical or biological agents  3) Water to be utilized for drinking purposes may only be drawn from taps designated for drinking water purposes. Fire hydrants and fire hose reels may not be utilized for drinking water purposes.  4 The Principal Contractor and Sub-Contractors must comply with the
Management	<ul> <li>The Principal Contractor must develop a vision implement and maintained it onsite</li> <li>Cement mixing to be done at a predetermined location on site which must include a solid, slab, and bunded edges to prevent runoff</li> <li>Contaminated run off water from the site must be treated such as to ensure that it does not pose a risk to the environment</li> <li>Any material which may have a harmful effect when disposed of by normal means must be disposed of in an appropriate manner to eliminate its harmful effect on the environment after disposal.</li> <li>The Principal Contractor must allow for and ensure that adequate procedures are implemented and maintained to ensure that waste generated is placed in suitable receptacles and removed from the site promptly.</li> <li>Plans to deal with spillages must be in place and maintained.</li> <li>No waste materials (liquid or solid) may be disposed of in drains.</li> <li>No burning of waste material may take place on site as such material being burned may result in pollution of the air or give off toxic vapours which could be harmful to the health of employees or any other person present on site.</li> </ul>
Alcohol and other Drugs	<ul> <li>No alconor and other principal Contractor permission of the Principal Contractor</li> <li>No person may be under the influence of alcohol or any other drugs while on the construction site.</li> <li>Any person on the construction site who is on prescription drugs must inform his/her Employer accordingly and the Employer shall in turn report this to the Principal Contractor immediately.</li> <li>Any person on the construction site who is suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to his/her Employer, who in turn must report this to the Principal Contractor forthwith.</li> <li>Any person on the construction site who is suspected of being under the influence of alcohol or other drugs must be removed from site immediately and be instructed to report back the next day for a preliminary inquiry. A full disciplinary procedure must be followed by the Contractor concerned and a copy of the disciplinary action must be forwarded to the Principal Contractor for his records.</li> </ul>

( )

## Annexure C

## CONTRACTOR'S SAFETY, HEALTH AND ENVIRONMENTAL DECLARATION FOR **TENDERS**

## INTRODUCTION

In terms of Construction Regulation 5(1)(h) of the Construction Regulations of February 2014 a Contractor may only be appointed to perform construction work if the Client is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act, Act 85 of 1993 and the Construction Regulations of February 2014. In line with this requirement the Contractor is required to read through this document carefully, sign it and submit it with his/her Tender.

### DECLARATION

( )

- I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of 1. February 2014 and the Construction Safety, Health and Environmental Specification attached in the tender document.
- I hereby declare that my company and its employees has the necessary competency and resources to safely carry out the construction work under this contract in compliance with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction Safety, Health and Environmental Specification.
- I hereby confirm that adequate provisions has been made in my tender to cover the cost of all Safety, Health and Environmental duties and responsibilities imposed on me by the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction Safety, Health and Environmental Specification.
  - 4. I confirm that I may not commence with any part of construction work under the contract until my Construction Safety, Health and Environmental Plan has been approved in writing by the Client.
  - I hereby confirm that copies of the following documentation will be kept on site for viewing and inspection purposes for the duration of the construction work: 5.
    - Client's Construction Safety, Health and Environmental Specification
    - Approved Construction Safety, Health and Environmental Plan a)
    - Occupational Health and Safety Act, Act 85 of 1993, and b)
    - Construction Regulations of February 2014. c) d)
    - I agree that my failure to complete and execute this declaration to the satisfaction of the Client will mean that I am unable to comply with the requirements of the Occupational Health and Safety Act, Act 85 of 1993 and Construction Regulations 2014, and accept that 1. my tender will be rejected.

131) *	
	Date:
Signature: (Person duly authorised to sign on behalf of Tender	
(Person duly authorised to sign on a second	

Annexure D

)

BASELINE RISK ASSESSMENT

please note that this is a Baseline Risk Assessment and not a detailed Risk Assessment of anticipated activities

	DATE	VG 1	5		RESIDUAL RISK Prioritisation Number		138
nistrict Office: Replacing existing fence with clear view	REV	RISK RANKING 0-5 6-10	11-16 17-20 21-25	ment	RECOMMENDED RISK CONTROL MEASURE		
k Assessanton Nongoma District Office: Replacing	WIMS NO: 071206/0001	RISK ASSESSOR RISK VALUE= ITKELIHOOD X CONSEQUENCE		Site Establishment		PUBLIC RISK	ENAL
please note that this is a Baseline KISK Assessing		CHSM/RA 2/000000 CONSEQUENCE	Insignificant 1  Minor 2  Moderate 3  Major 4	Severe		ZARDS SHE	
please note that	Project:	REF NO LIKELIHOOD	Rare 1 Unlikely 2 Possible 3		MAIN	REF NO SUB ACTIVITY	

rd (	٧	74	
2x2=4	3X3=9	3x3=9	
Adequate training, applicable PPE, safe systems of work and supervision	(Stack and storage) Safe work Procedure, safe systems of work and supervision and competent and authorised mobile plant/vehicle drivers	competent and authorised mobile plantivers,	
3x4=12:3	3x5=12:3	3x4=12:3	
Tripping hazard, dust inhalation, intermitting noise level	Dust inhalation, intermitting noise level	Tripping hazard dust and noise	
Spilling of oil, diesel, petrol	None	Spilling of oil, diesel and petrol	
Back strain, cuts, abrasions, heat exhaustion,	and dust inhalation Back strain, abrasion, noise level	Back strain, cuts, abrasion,	exd noisi dust
uls, nt,	fencing Falling of material, struck by tools, poor	posture and moving of vehicles Struck by tools, entanglement,	insufficient fencing of hoarding
Placing and securing of site office	Delivering and off-loading of	Fence Pence Pence for	all machines and material

( )

	Risk Prioritisation	Number	y)	4	M
	RESIDUAL RISK		3x4=12	4=2X2	3x4=12
nce	RECOMMENDED	RISK CON I ROL MEASURE	Training, PPE, safe systems of work and supervision	Adequate Training, PPE, safe systems of work and supervision	Risk Assessment, training to employees, Safe & proper use of hand tools; wearing required PPE practise of manual lifting of material
Security Fe	PURE RISK		5x5=25:5	3x4=12:3	5x4=20:4
Removal of Existing Perimeter Security Fence	PUBLIC RISK		Tripping hazard, dust inhalation , intermittent noise level,	Tripping hazard, dust inhalation, intermittent noise level	Fixtures being removed falling on public noise
al of Existin		ENVIRONINENTAL RISK	Spilling of oil, diesel, petrol	Land pollution, littering from poor house keeping	Land pollution, littering from poor house keeping
Remov		НЕАГТН RISK	Back strain, cuts, abrasion, heat exhaustion, noise exposure, dust inhalation	Back strain, cuts, abrasion, heat exhaustion, noise exposure, dust	inhalation Cuts, abrasions and fractures
		ЭН2 2ОЯАХАН	Poor traffic control, Incompetent drivers, inadequate signage's Moving of construction vehicle colliding	Struck by tools, excessive dust inhalation, bumping against objects	Struck by tools, falls,
		YTIVITƏA BUZ	Site clearance and de-vegetation	Breaking up and removing mass concrete	Dismantling of security fence, high fencing pales, post
	MAIN	REF NO			

-1	Н	н	4
1X1=1	24=2	2x1=2	5x4=20
Training, PPE, safe work procedures and supervision	Training in pre-use inspection, maintenance; Training in using correct tools, inspection; Wearing required PPE (i.e. Overalls, hard hats, safety shoes, goggles, etc.)	Safe systems of work. Training, PPE	Training in pre-use inspection, maintanace, Wearing required PPE (i.e. overalls, hard hats safety shoes, googles etc)
2x1=2:1	3x3=9:2	3x3=9:2	5x5=25:5
None	Struck by hand tools, tripping,	None	Noise, dust collisions, death
None	Use of hand tools	None	Spilling of oil, diesel, petrol
Burns, respiratory failure, cuts, abrasions,	Abrasions, burns, hand injuries, eye injuries, back injury, heat exhaustion	Back strain, dust inhalation, cuts and abrasions	Back strain, heat exhaustion, bruising, cuts, abrasions and fatality
Electrocution, struck by tools, sharp edges,	Struck by hand tools, tripping,	Struck by tools, bumping against	Tripping, struck by, bumping against, machines colliding
Isolation of services	Use of hand tools	Erecting temporal fence	Removal of Rubble by machine and labour

٠	٧
•	٧

		Risk Prioritisation Number	ਜ	N	4	2	7
	And the state of t	RISK RISK	2x1=2	3x2=6	5x4=20	2x3=6	2x3=6
	***************************************	RECOMMENDED RISK CONTROL MEASURE	Training, PPE, Barricading, safe systems of work and supervision.	Training, PPE, Barricading, safe systems of work and supervision.	Flag man, traffic control, reverse hooters reflective vest, proper system of work.	Training, Competent person appointed to supervise excavation work.	Watering where required, cover
The state of the s		PURE RISK	3x3=9:2	3x3=9:2	5x5=25:5	4x3=12:3	4x3=12:3
	Excavations	PUBLIC RISK	None	Noise, dust, collisions, death	Dust, noise, death, severe cuts and abrasions	None	None
	A PART A	ENVIRO MENTAL RISK	None	Spilling of oil, diesel, petrol	Contamination of environmental resources due to leaking of fuel, diesel and oil	None	Environmental degradation
* ,	- Linky	НЕАLТН RISK	Backstrain, dust inhalation, cuts and	Back strain, heat exhaustion, bruising, cuts, abrasions	Fractures, death ,	Injuries to workers and visitors	Spoil falling into excavation.
		анг саядхдн	Tripping, struck by, bumping against,	Struck by tools , tripping, Falling into excavations, Hidden	Machinery colliding with people and vehicles, machine coming into contact with hidden services. Heated	Collapse of excavation	Excessive amounts of
	The state of the s	YTIVITOA BUS	Setting out for excavations	Digging of Excavations manually	Digging of Excavations by machines	Shoring and bracing,	Stockpiling of soil
	MAIN	REF NO					

	7	r-1		-		त्न		To the state of th		ļ <del>(</del> 1				-4							+				+-	l			
	3X3=6:		2x2=4			2x2=4		····		2x1=2				2x1=2			6-0.0												
hessian if exposed for prolonged period	Competent personnel to	handle Soil poising PPE, Supervision	Training,	appointed to	supervise excavation work	Training,	Competent person	appointed to	excavation work.	Training, PPE,	Barricading, safe	systems of work	מוות פתהכו אפנייי	Training, PPE,	Barricading, safe	and supervision.		Training, PPE,	evetems of work	and supervision.									
	4x4=16:3		3x2=6:2			3x2=6:2				3x2=6:2				3x2=6:2				2x3=6:2					·—··						
	None		None			None				anoly	252			None				None											
	Environmental	degradation	None			Cosi	contamination	from Cement	spills,		Cement	ofinage		Comont	spillage	,		Contamination	ਰੰ	environmental	resources due	to leaking or tuel, diesel and	ভ						
Collapse of excavation causing injury to workers or death	e si	sight, damage lungs	Skin initant.	falling, Cuts,			Abrasion, skin	Circulatory	problems		Stats .	&abrasions, inhalation of	duct, contact	dermatitis	CUTS &abrasions,	inhalation of	duct, contact	Circulatory	problems.	crushing, noise	paonpui	hearing loss,							
dust, Spoiling too close to edge of excavation, chorn wafer	Tun off		Door nochire	Skin irritant,	insect bite, falls		Poor position of	work, Skin	- Ingeor.		Striking against	area, sharp	eoge, hazardous	substance	Striking against	alca, sump edge,	hazardous	substance	Sauck by	explosion and	fire, struck by	flying objects							
	Saire Control	Soli Poisounig	ut Poor posture, Skin inflant, falling, Cuts, none None Sx2=6:2 Training, appointed to supervise excaration work similarity inflant, contamination of Striking against Cuts (Cement Pazardous duct, contact sharp inhalation of Striking against Cuts (Contact Striking against Cuts Spillage Azzardous duct, contact sharp inhalation of Striking against Cuts Supervise)  Substance dermatitis Contamination None 3x2=6:2 Training, PPE, systems of work and supervision.  Substance dermatitis Contact None 3x2=6:2 Training, PPE, substance dermatitis contamination of dermatitis substance dermatitis Contact None Sx2=6:2 Training, PPE, systems of work and supervision.  Substance dermatitis Contact None 3x2=6:2 Training, PPE, substance dermatitis Contacting, safe systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance dermatitis Contacting, Safe Systems of work and supervision.  Substance Systems of work and supervision.  Substance dermatitis Contacting None Sx3=6:2 Training, PPE, Systems of work and supervision.  Substance Systems of work and supervision.  Subst		Soj	Compaction	מווע סמטיוווויוא																						

r	`	
١	٦	

	Risk Prioritisation Number	N	2	Н
	RESIDUAL RISK	3x3=9	2x3=6	2x1=2
90	RECOMMENDED RISK CONTROL MEASURE	Training, Competent person appointed to supervise	Training, PPE, Barricading, safe systems of work and supervision.	Training, PPE, Barricading, safe systems of work and supervision.
security Fen	PURE RISK	4x4=16:3	3x4=12:3	3x2=6:2
Installation of Perimeter Security Fence	PUBLIC RISK	None	None	None
Installation o	ENVIRO MENTAL RISK	Cement Spillage	None	None
And the state of t	НЕАLТН RISK	Back strain, Dust inhalation, Cuts, Abrasion, skin irritant, Circulatory problems	Cuts, Abrasion, skin imtant, Circulatory problems	Cuts &abrasions, inhalation of duct, contact dermatitis
	3H2 SGAASAH	Positioning & installing post from unsafe platform, Untrained persons cutting steel bars with grinder	Poor posture, Striking against area, sharp edges, Excessive	amount of dust Striking against area, sharp edge, Noise induced.
	YTIVITOA BUZ	Fixing of 2.4m Thick main post, thick stay post, thick hollow section gate post embedded in concrete	Securing Steel plate	Fixing of fencing panels by bolts (ant temper screws and sheer off nuts and bolts)
MAIN ACTIVITY	REF NO			

. )

( )

4	2	4	2	8
9X4=Z0	222=4	5x4=20	2x3=6	3X3=9
Log-out tag-out, safe systems of work, training PPE	Safe systems of work and supervision. Training, Competent person appointed to supervise	Complying/abiding with Hot work procedure. Safe systems of work. Competent welder. Applicable PPE to welding	Proper handling, Training, PPE, Barricading, safe systems of work and supervision	Training, Competent person appointed to supervise
5x5=25:5	5x4=20:4	5x5=25:5	3x4=12:3	4x4=16:3
Electrocution, fatality	Structure falling to the public	Nопе	None	None
None	None	None	None	Cement Spillage
Bunrs, injuries, electrocution, burns, cuts and fatality	Cuts, abrasions, fractures, structure falling onto personnel	Electrocution, Burns, Cuts fatality	Backstrain, dust inhalation, cuts and abrasions	Back strain, Dust inhalation, Cuts, Abrasion, skin irritant, Circulatory problems
Electrocution, Electrical disturbance at hospital, unauthorised personnel walking over electrical	Sed, Sed, Sed, Sed, Sed, Sed, Sed, Sed,	Electric shock fumes and gases, fire and expulsion. Noise induced, struck by tools, hands caught between areas and sharp	Struck by tools, tripping, Falling into excavations, Hidden	Positioning & installing post from unsafe platform, Untrained persons cutting
Working with existing electrical reticulation	Securing of gate into frame	Welding of hollow section frame, horizontal bracing and diameter drop bolts	Placing of 4 core 4mmsq XLPE Cable underground	Securing 7.4m Lighting Poles

( )

	7	
	3X3=9	
	Adhere to Fall protection plan, Training Personnel on Fall protection to Supervise	
	4x4=16:3	
	None	
	None	
	Back strain, heat exhaustion	
steel bars with	grinder Working at heights, falls,	
	Fixing of LED Lights	
		•

( )

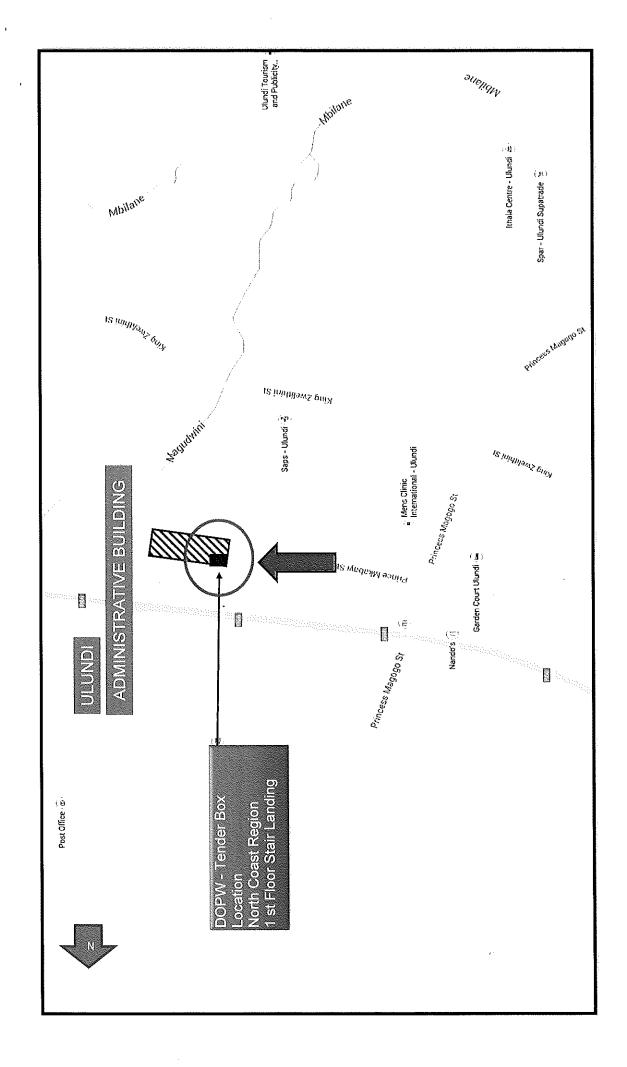
		Onsite general	Onsite general Construction activities	Se	
Activity	Risk to safety	Risk to Health	Risk to Environment	Risk to Public Safety	Control Measures
Drilling	Entanglement, struck by flying objects, electricity, hazardous substance dust, noise	Electrocution, dust inhalation, noise induced hearing foss, muscle strain, foreign objects in	Contamination of natural resources (spillages)	dust , noise	Safe systems of work , Training, PPE, barricading, Supervision etc
Sanding	Grazing, wrist strain, bumping	Dust inhalation, dust in eyes, minor abrasions	поле	dust nuisance	Safe systems of work ,PPE, Housekeeping, barricading, Supervision etc
Painting	Bumping against, wrist strain	Inhalation of vapours, paint in eyes, minor abrasions	Contamination of natural resources (spillages)	None	Safe systems of work ,PPE, ventilation of area, good housekeeping
Grinding	Electrocution, entanglement, tripping hazards, struck by fund materials etc.	Noise induced hearing loss, cuts, loss of limbs, electrocution	попе	Noise, dust etc	Safe systems of work ,Wet cutting, barricading, temporary guarding, signage Supervision ,etc
Breaking of concrete	Struck by flying particles, impact hazards, vibration,	Noise induced hearing loss ,dust inhalation , particles in eve. electrocution . etc	None	Noise, dust etc	Safe Systems of work , barricading, temporary guarding, signage Supervision etc
Cement Mixing	Struck by sharp edges, poor working position, hazardous	Inhalation of cement dust, back strain, dermatitis	Contamination of natural resources (spillages)	Noise, dust	Safe Systems of work , PPE, Housekeeping, barricading, bunding, Supervision etc
Compaction of soil	Struck by tools, flammable substances , flying materials	Back strain, heat exhaustion, bruising, dust inhalation, burns	Contamination of resources with fuel	Noise	Safe systems of work, barricading, signage, PPE, Supervision etc
Loading and unloading by hand	Bumping against edges , Hands caught between ,	Back strain, exhaustion, bruising, hand injuries,	None	None	Safe systems of work, PPE, Training in correct lifting procedures , Supervision etc
Ladder use	Incorrect positioning, overreach, Overhead hazards, dropping of tools from ladder, Falls	Broken bones , death, electrocution	None	None	Safe systems of work , PPE usage, Supervision etc

<u>)</u>		1
Safe systems of work, PPE, Supervision etc	Safe systems of work, PPE, Supervision etc	**************************************
None	None	
попе	поле	
Electrocution , fractures etc	Cuts ,Bruising ,Foreign material in eyes	
Electricity, tripping hazards	by, bumping ons, sharp t between netal particles	2 <del>1</del> 8
Extension cords	Hand tools	

Prepared by: Signature: Date:

\_\_\_\_05 February 2020 \_\_\_\_

 $\langle \cdot \rangle$ 





1.

# Annexure 5 Joint Venture Agreement (March 2004) (First Edition of CIDB document 1017)

of the first part and  of the second part and  of the third part. (allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by (name of Employer)  to the KZN Department of Public Works in respect of the following project: for (brief description of Contract)	PREAMBLE This agreement is made and entered into by and between
of the second part and  of the third part. (allow for additional parties as necessary). Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by (name of Employer) to the KZN Department of Public Works in respect of the following project:	
of the second part and  of the third part. (allow for additional parties as necessary). Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by (name of Employer) to the KZN Department of Public Works in respect of the following project:	
of the third part.  (allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by (name of Employer)  to the KZN Department of Public Works in respect of the following project:	of the first part and
of the third part.  (allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by (name of Employer)  to the KZN Department of Public Works in respect of the following project:	
of the third part.  (allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by (name of Employer)  to the KZN Department of Public Works in respect of the following project:	
(allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by  (name of Employer)  to the KZN Department of Public Works in respect of the following project:	of the second part and
(allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by  (name of Employer)  to the KZN Department of Public Works in respect of the following project:	
(allow for additional parties as necessary).  Whereas the foregoing parties have resolved to form a Joint Venture under the title of  for the exclusive purposes of securing and/or executing the Contract to be awarded by  (name of Employer)  to the KZN Department of Public Works in respect of the following project:	
to the KZN Department of Public Works in respect of the following project:	(allow for additional parties as necessary).
to the KZN Department of Public Works in respect of the following project:	
to the KZN Department of Public Works in respect of the following project:	
·	
101 (brief description of Contract)	to the KZN Department of Public Works in respect of the following project:
	for (brief description of Contract)

WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE

Now it is hereby agreed as follows:

#### 2. DEFINITIONS AND INTERPRETATION

#### 2.1 <u>Definitions</u>

The following words and expressions shall have the meanings indicated, except where the context otherwise requires. Defined terms and words are, in general, signified in the text of the Agreement by the use of capital initial letters, but the absence of such letters does not necessarily signify that a term, or word, is not defined.

'Agreement' means the agreement between the Members of the Joint Venture and includes this model form of agreement together with the Preamble, Specific Provisions, if any, Schedules 'A', 'B' and 'C' and any relevant Documents prepared prior to the signing of the Agreement and appended thereto.

'Contract' means the contract with the Employer for the supply of the Deliverables, for the purposes of securing and executing which, the Joint Venture has been formed.

'Deliverables' means the works and/or services, equipment, materials, goods, etc. to be furnished by the Joint Venture to the Employer in terms of the Contract.

'Document' means any written, drawn, typed, printed, or photographic material, which relates to the Agreement.

'Employer' means the person, or body, which is to award the Contract and will employ the Joint Venture if it is awarded the Contract.

'Joint Venture' means the joint venture formed by the Members in accordance with the Agreement.

'Management Committee' means the body established in terms of the Agreement to manage all aspects of the work of the Joint Venture in securing and executing the Contract and in meeting the provisions for the Agreement.

'Member' means a person, or body which, being a party to the Agreement, is a member of the Joint Venture.

'Member's Interest' means the proportion expressed as a percentage, which the total monetary value of all resources provided and contributions made by a Member towards the execution by the Joint Venture of the Contract bears to the total of such values by all Members and, unless otherwise indicated in the Agreement, represents the extent to which the Member participates in the fortunes of the Joint Venture.

'Representative' means the person representing a Member on the Management Committee.

'Schedules' means Schedules 'A', 'B' and 'C' which set out general, financial and other information relating to the Members and the obligations, duties, rights, risks and benefits arising from their participation in the Joint Venture.

'Specific Provisions' means the variations, if any, required to this standard form of agreement for the specific purposes of the Agreement.

#### 2.2 Interpretation

Unless inconsistent with the context, an expression in the Agreement which denotes:

- · any gender shall include the other genders
- · a natural person shall include a juristic person and vice versa
- · the singular shall include the plural and vice versa

#### 2.3 Headings

The headings to clauses of the Agreement shall not be considered part thereof, nor shall the words they contain be taken into account in the interpretation of any clause.

2.4 Law

The Agreement shall be construed in accordance with and governed by the laws of the Republic of South Africa and the English language versions shall prevail.

2.5 <u>Language</u>

English shall be exclusively used by the Members in the preparation of Documents unless otherwise indicated.

2.6 Conflict between Agreement and Contract

Should any provision of the Agreement be in conflict with the terms of the Contract, the Agreement shall be amended to the approval of the Management Committee so as to eliminate the conflict.

#### 3. JOINT VENTURE GENERAL

#### 3.1 Establishment and Purpose

The Joint Venture established by the Members in terms of the Agreement is an unincorporated association with the exclusive purposes of securing and executing the Contract for the benefit of the Members.

#### 3.2 Termination

The operation of the Joint Venture and the validity of the Agreement shall terminate if and when it becomes evident that the Joint Venture will not be awarded the Contract, or, if the Joint Venture secures the Contract, when all obligations and rights of the Joint Venture and the Members in connection with the Contract and the Agreement have ceased and/or been satisfactorily discharged.

Unless otherwise decided by the Management Committee, the Agreement shall not terminate if a Member changes its name, or is taken over by, or merged with, another body.

This agreement will terminate when any one of the Members resigns, are liquidated or opts out of this agreement and the Joint Venture will be in breach of contract with the Employer and their contract could be cancelled.

#### 3.3 Exclusivity

Unless otherwise agreed by the Management Committee, or provided for in the Contract no Member shall engage in any activity related to the Contract other than as a Member of the Joint Venture and Members shall ensure that their subsidiaries and other bodies over which they have control comply with this requirement.

#### 3.4 Participation of Members

Except as may otherwise be stipulated in the Agreement, each Member shall be responsible for all costs incurred by it prior to the date of inception of the Agreement.

Subsequent to the date of inception of the Agreement, each Member shall, participate in the operations, risks, responsibilities and fortunes of the Joint Venture including, inter alia, the provision of funding, sureties, guarantees, insurances, human and other resources and participation in profits and losses to the extents indicated in the Schedules. Participation in any aspect not covered in the Schedules shall, if an agreement cannot be reached between the Members, be to the same extents as indicated by the Members Interests.

#### 3.5 Management

The affairs of the Joint Venture shall be directed and controlled by the Management Committee, as set out in Section 4 hereof.

#### 3,6 Confidentiality

All matters relating to the Agreement and the Contract shall be treated by the Members as confidential and no such matter shall be disclosed to any third party without the prior written approval of the Management Committee.

No Member shall be party to the dissemination of publicity relating to the Contract, or the Agreement, without the prior written approval of the Management Committee and the Employer.

#### 3.7 Assignment

No Member shall cede, assign, or in any other way make over any of its rights, or obligations, under the Agreement without the prior written consent of the Management Committee.

#### 3.8 Subcontracting

No Member shall subcontract any obligation, work or duty for which it is, itself, responsible in terms of the Agreement without the prior written consent of the Management Committee.

#### 3.9 Variations to Agreement

No variation, modification, or waiver of any part of the Agreement shall be of any force, or effect, unless unanimously agreed by the Members and reduced to writing.

#### 3.10 Liability

Each Member warrants that it will indemnify the other Members against all legal liabilities arising out of, or in connection with the performance of its obligations under the Agreement.

It is acknowledged by the Members that they may be held jointly and severally liable in respect of claims against the Joint Venture by the Employer or third parties.

#### 4. MANAGEMENT OF JOINT VENTURE

#### 4.1 General

The affairs of the Joint Venture shall be directed, controlled and managed by the Management Committee, which, within the terms of the Agreement and the Contract, shall have full authority to bind the Members in all matters relating to the affairs of the Joint Venture.

Communication between the Joint Venture and the Employer, or third parties, relating to the Contract shall be conducted exclusively by the Management Committee, or by such person as it may delegate to perform this function.

The Management Committee shall have the power to appoint a project manager and/or such other persons as it may see fit to appoint for the purpose of executing the Contract and may delegate such of its powers, responsibilities and duties as it may consider necessary, or desirable, to persons or bodies appointed or seconded for this purpose.

Such administrative functions as are necessary to ensure the effective operation of the Management Committee shall be performed by its chairman.

#### 4.2 <u>Management Committee</u>

#### 4,2,1 Composition

The Management Committee shall, unless otherwise agreed by all the Members, consist of one Representative of each Member and each Member shall be obliged, at all times, to maintain a Representative on the Management Committee.

Each member shall, not later than three working days after the signing of the Agreement, appoint its Representative and notify the other Members of the name and contact details of the Representative. Such Representative shall have the power to bind the Member that he represents in all matters relating to the execution of the Contract and the performance of the Agreement.

A Member shall be entitled, after giving the other Members not less than three working days written notice of his intention to do so, appoint, remove and/or replace, an alternate who shall, at any meeting of the Management Committee from which the Representative whom he represents is absent, be vested with all rights and powers and subjected to all the obligations of the absent Representative.

The chairman of the Management Committee shall be the Representative of the Member which has the largest Member's Interest. If two, or more, Members have the same, largest Member's Interest, the chairmanship shall rotate between the Representatives of such Members at three monthly intervals, the order of rotation to be determined by ballot.

Notwithstanding the foregoing, the chairmanship of the Management Committee may be determined, or changed, at any time by unanimous decision of the Management Committee.

No remuneration shall be paid by the Joint Venture to Representatives or their alternates for serving on the Management 4.2.2 Meetings

Meetings of the Management Committee shall take place at such times and places as the Management Committee may determine, provided that the chairman shall convene a meeting of the Management Committee to be held not later than ten working days after he has been requested, in writing, by a Member to do so. Not less than five working days written notice of any meeting of the Management Committee shall be given to all Representatives and their alternates.

The Management Committee may permit, or invite, persons other than Representatives or alternates to attend any of its meetings, but such persons shall not have voting rights.

#### 4.2,3 Decisions

Each Representative shall have one vote on the Management Committee and where, in terms of this clause, a casting vote is required, this shall be exercised by the chairman.

All decisions of the Management Committee shall, desirably, be unanimous. Accordingly, if unanimity cannot, initially, be achieved in regard to a decision, the meeting at which that decision is sought shall be adjourned for a period of 48 hours to enable Representatives to consult with their principals. If, on resumption of the adjourned meeting, unanimity can still not be achieved, the decision, provided it is not one requiring unanimity of the Members, shall be taken by majority vote and, in the event of a tie, the chairman shall exercise a casting vote.

A Member not satisfied with a majority decision of the Management Committee may declare a dispute, to be dealt with in terms of Clause 8 hereof, but the majority decision shall, nevertheless, be implemented with immediate effect.

Decisions of the Management Committee, whether taken at a meeting, or otherwise, shall be recorded in written minutes, which shall be distributed by the chairman to reach the Representatives not later than five working days after those decisions were taken. Such minutes shall be deemed to have been affirmed by the Representatives unless written notice of dissent is received by the chairman not later than three working days after receipt of the minutes by the Representative.

#### 4.2.4 Powers and duties

The functions, responsibilities and powers of the Management Committee shall include, inter alia, those listed below:

- 4,2,4,1 Formulating overall policy in regard to the achievement of the objectives of the Joint Venture.
- 4.2.4.2 Managing the day to day affairs of the Joint Venture.
- 4.2.4.3 Monitoring, directing and co-ordinating the activities of the Members to ensure that the objectives of the Joint Venture are achieved and that the obligations and responsibilities of the individual Members are met.
- 4.2.4.4 Monitoring and controlling the financial affairs of the Joint Venture and ensuring that proper books of account and financial records relating to affairs of the Joint Venture are maintained in an approved form and submitted to the Management Committee for approval at regular intervals, which shall not be longer than one month.
- 4.2.4.5 Determining the necessity for and the details of any changes in the duties and responsibilities of Members provided that any resulting changes in Members' Interests shall be unanimously approved by the Members.
- 4.2.4.6 Determining the terms and conditions of employment of personnel and the emoluments applicable to staff seconded to the Joint Venture by the Members.
- 4,2,4.7 Controlling and approving the appointment of all subcontractors.
- 4.2.4.8 Procuring, after the completion of the Contract and the release of all bonds, guarantees and sureties given in respect of the performances of the Joint Venture and the Members, the preparation and auditing of a final set of accounts, on the basis of which the final profits, or losses, attributable to the individual Members shall be determined and any necessary adjustments effected.

#### 5 RESOURCES OF JOINT VENTURE

The resources to be utilised by the Joint Venture in securing and executing the Contract shall, insofar as these are to be provided directly by the Members, be as set out in the Schedules and may, from time to time, be amended by decision of the Management Committee, provided that the Member's Interests are not, except with the unanimous approval of the Members, affected thereby.

Similarly, specific areas of responsibility of the Members for the performance of work and the provision of facilities shall be as set out in the Schedules and may, from time to time, be amended by decision of the Management Committee, provided that the Members' Interest are not, except with the unanimous approval of the Members, affected thereby.

#### 5.1 Schedule 'A' (General)

Schedule 'A' shall contain general information relating to the Joint Venture including, inter alia, the following:

- 1. The Employer's name and address.
- 2. A brief description of the Contract and the Deliverables.
- 3. The name, physical address, communications addresses and domicilium citandi et executandi of each Member and of the Joint Venture.
- 4. The Members' Interests.
- 5. A statement indicating whether, or not, Specific Provisions apply to the Agreement.
- 6. A schedule of insurance policies which must be taken out by the Joint Venture and by the individual Members.
- 7. A Schedule of sureties, indemnities and guarantees that must be furnished by the Joint Venture and by the individual Members.
- 8. Details of the persons, who, in the event of failure by the Members to reach agreement on the appointments of mediator and arbitrator, will nominate appointees to these positions in terms of Clauses 8.2 and 8.3.

#### 5.2 Schedule 'B' (Financial)

Schedule 'B' shall contain information regarding the financial affairs of the Joint Venture including, inter alia, the following:

- The working capital required by the Joint Venture and the extent to which and manner whereby this will be provided and/or guaranteed by the individual Members from time to time.
- 2. The banking accounts that are to be opened in the name of the Joint Venture and the manner in which these are to be operated.
- 3. The rates of interest that will be applicable to amounts by which Members are in debit, or credit, to the Joint Venture.
- 4. The names of the auditors and others, if any, who will provide auditing and accounting services to the Joint Venture.
- 5. The intervals at which interim financial accounts and forecasts will be prepared for approval by the Management Committee.
- 6. Insofar as not covered in Schedule 'C', the basis on which contributions of various types by the Members towards the work of the Joint Venture in securing, executing, managing and satisfactorily completing the Contract, will be valued.
- 7. The basis on which profits and/or surplus cash will, if available from time to time, be distributed to Members.
- 8. The basis upon which losses, if any, are to be apportioned to Members.

#### 5.3 Schedule 'C' (Contributions by Members)

Schedule 'C' shall set out the contributions of various types, other than cash, that will be made by the individual Members towards the work and obligations of the Joint Venture and shall, as far as possible, indicate the monetary values to be placed on such contributions, which may include, inter alia, the following:

- 1. Staff seconded to the Joint Venture.
- 2. Work carried out and services provided to, or on behalf of, the Joint Venture.
- 3. Plant, equipment, facilities etc. made available for use by the Joint Venture.
- 4. Materials and goods supplied to, or on behalf of, the Joint Venture.
- 5. Licences, sureties, guarantees and indemnities furnished to, or on behalf of, the Joint Venture.
- 6. Joint Venture Disclosure form required for the Contract.

#### 6. BREACH OF AGREEMENT

If a Member breaches any material provision of the Agreement, or delays or fails to fulfil its obligations in whole, or in part, and does not remedy the situation within fourteen calendar days of receipt of notice from the Management Committee, or another Member, to do so, the other Members shall have the right, without prejudice to any other rights arising from the default, to summarily terminate the Agreement and re-assign the defaulting Member's rights and obligations in the Joint Venture as they see fit and withhold any moneys due to the defaulting member by the Joint Venture.

Each Member shall indemnify the other Members against all losses, costs and claims which may arise against them in the event of the Agreement being terminated as a result of breach of the Agreement by the said Member.

#### 7. INSOLVENCY OF MEMBER

Should a Member be placed in liquidation, or under judicial management, whether provisionally or finally, or propose any compromise with its creditors, the other Members shall be entitled to proceed in terms of Clause 6, as if the Member had breached the Agreement.

#### 8. DISPUTES

#### 8.1 Settlement

The Members shall negotiate in good faith and make every effort to settle any dispute, or claim, that may arise out of, or relate to, the Agreement.

If agreement cannot be reached, an aggrieved Member shall, if he intends to proceed further in terms of Clause 8.2 hereof, advise all other Members in writing that negotiations have failed and that he intends to refer the matter to mediation in terms of Clause 8.2.

#### 8.2 Mediation

Not earlier than ten working days after having advised the other Members, in terms of Clause 8.1, that negotiations in regard to a dispute have failed, an aggrieved Member may require that the dispute be referred, without legal representation, to mediation by a single mediator.

The mediator shall be selected by agreement between the Members, or, failing such agreement, by the person named for this purpose in Schedule 'A'. The costs of the mediation shall be borne equally by all Members.

The mediator shall convene a hearing of the Members and may hold separate discussions with any Member and shall assist the Members in reaching a mutually acceptable settlement of their differences through means of reconciliation, interpretation, clarification, suggestion and advice. The Members shall record such agreement in writing and thereafter they shall be bound by such agreement.

The mediator is authorised to end the mediation process whenever in his opinion further efforts at mediation would not contribute to a resolution of the dispute between the Members.

#### 8.3 Arbitration

Where a dispute or claim is not resolved by mediation, it shall be referred to arbitration by a single arbitrator to be selected by agreement between the Members or, failing agreement, to be nominated by the person named for this purpose in Schedule 'A'.

The Member requiring referral to arbitration shall notify the other Members, in writing, thereof, not later than thirty calendar days after the mediator has expressed his opinion, failing which the mediator's opinion shall be deemed to have been accepted by all Members and shall be put into effect.

Arbitration shall be conducted in accordance with the provisions of the Arbitration Act No. 42 of 1965, as amended, and in accordance with such procedure as may be agreed by the Members or, failing such agreement, in accordance with the rules for the Conduct of Arbitrations published by the Association of Arbitrators and current at the date that the arbitrator is appointed.

The decisions of the arbitrator shall be final and binding on the Members, shall be carried into immediate effect and, if necessary, be made an order of any court of competent jurisdiction.

#### 9. DOMICILIUM

The Members choose domicilium citandi et executandi for all purposes of and in connection with the Agreement as stated in Schedule 'A'. A Member shall be entitled to change his domicilium from time to time, but such change shall be effective only on receipt of written notice of the change by all other Members.

	Member No. 1	
Thus done and signed at	thisday of	20
For and on behalf of		[Company]
by [name]	who warrants his au	Ithority to do so.
As witnesses 1.	As witnesses 2.	
	Member No. 2	
Thus done and signed at	this day of	20
For and on behalf of		[Company]

by [name]	who warrants his	s authority to do so.
As witnesses 1	As witnesses 2	
	Member No. 3	·
Thus done and signed at	this day of	20
For and on behalf of		[Company]
by [name]	who warrants his	s authority to do so.
As witnesses 1.	As witnesses 2	

[Allow for additional parties as necessary].

#### Annexure 6

## Occupational Health and Safety Specification

(OHSE SPEC)



Project Name:

WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE

Project Code:

071206/0001

Agent Name:

Mr NI Nyawo

Region:

Northern Region

District:

Ulundi

Ward no.:

Ward 11

HEALTH AND SAFETY IMPLEMENTATION COSTING

Contractor to give a breakdown of his Health and Safety costs on this sheet.

ITEM	DESCRIPTION	UNIT	QUAN- TITY	MONTHS (Indicative)	RATE	AMOUNT
			(a)		(b)	(a) x (b)
1	MEDICALS					
1.1	Pre-employment medical	Nr.	_		***************************************	
1.2	Re-medicals - yearly	Nr.	_			
	TOTAL					
2	PERSONAL PROTECTIVE EQUIPMENT					
2.1	Over 1910					
	Overalls Hard Hats	Nr. Nr.				
	Safety boots/shoes	Nr.				
	Gloves	Nr.				
	Gumboots steel toe cap	Nr.				
2.6	Safety glasses	Nr.				
2.7	Reflector Bibs	Nr.				
2.8	Barricading Material	M M				
2.9	Dust masks	Box				
£1.2	Dust Highly	20				
	TOTAL	ŧ				
3	FIRE FIGHTING		İ			
3.1	Fire extinguishers - 4.5Kg	Nr،				
3.2	Surveys - Annual Service	Nr.				
	TOTAL					
4	HEALTH AND SAFETY PERSONNEL					
4.1	Safety Manager	Nr.				
4.2	Safety Officer	Nr.				
4.3	Construction Phase Safety, Health, Environmental and	Nr.				
	Waste Management Plan TOTAL					
	10101					
5	FACILITIES					
•	Troin in the second					
5.1	Provision of ablution facilities	Nr.				
5.2	Service and maintenance of ablution facilities	Nr.				
5.3	Provision of eating areas	Nr.				
5.4	Cleaning of Lay down and other storage areas	Nr.	1			
5.5	Wash hand basin	Nr.				
5.6	Hot and Cold running water	Nr.				
5.7	Degreasing & Toilet soap	Nr.				
	TOTAL			1 - 1 - 1 - 1		
			Į			

<b>11</b> 11.1	OTHERS (Project Specific) TOTAL	Nr.		
	TOTAL	, i		4.444.04.2011.015.1
10.4	Replacement of Callipers TOTAL	Nr.		
	Replacement for Permit books	Nr.		
0.2	Replacement of tags	Nr.		
0,1	Replacement of Locks required for lockouts	Nr.		
.0	ELECTRICAL			
	TOTAL			
	Information Posters for awareness	Nr.	fatiti.	
,1	All Signage as required by Law, regulatory, warning and	Nr.		
9	SIGNAGE			
	TOTAL			the second of the second
	Fire Fighting	Nr.		
	First Aid Level 1	Nr.		
.1	SHE Representative	Nr.		
8	TRAINING			
	TOTAL			
'.1	Replenishment of boxes and other supplies	Nr		
7	FIRST AID			
	TOTAL			
	Temporary hand railing material and kick flats Chin Straps	Nr. Nr.		
	for project)			
	Lifelines and vertical fall arrest systems Scaffolding – material, erection and inspection (Estimate	Nr. Nr.		
	Safety harnesses with Scaffold hooks	Nr.	1	
	Safety harnesses with double lanyards	Nr.	1 .1	

## WAIVER OF CONTRACTOR'S LIEN

DEFINITIONS						
Contractor:						
Employer:	Head: Public Works (KZN Department of	Public Works: Province of KwaZulu-Natal)				
Agreement:	GCC FOR CONSTRUCTION WORKS - S	SECOND EDITION 2010				
Works (description):	WIMS: 071206/0001: ZNTU 03997 W: NO EXISTING PERIMETER SECURITY FEN	WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE				
Site:	North Coast Region: Zululand District Mu	nicipality: Ulundi Municipality				
AGREEMENT						
The Contractor waives, in the Works to be executed	n favour of the Employer, any lien or right o d on the Site	of retention that is or may be held in respect of				
Thus done and signed at		on				
Name of signatory		Capacity of signatory				
As witness		For and on behalf of the contractor who by signature hereof warrants authorisation hereto				

#### **ADDITIONAL SPECIFICATION - EPWP**

<u>SL</u>

EMPLOYMENT AND TRAINING OF EPWP BENEFICIARY ON THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP) Infrastructure Projects:

#### CONTENTS

SL 01	SCOPE
SL 02	TERMINOLOGY AND DEFINITIONS
SL 03	APPLICABLE LABOUR LAWS
SL 04	EXTRACTS FROM MINISTERIAL DETERMINATION REGARDING EPWP
SL 05	EMPLOYER'S RESPONSIBILITIES
SL 06	PLACEMENT OF RECRUITED EPWP BENEFICIARY
SL 07	TRAINING OF YOUTH WORKERS
SL 08	BENEFICIARY (EPWP BENEFICIARY) SELECTION CRITERIA
SL 09	CONTRACTUAL OBLIGATIONS IN RELATION TO EPWP BENEFICIARY
SL 10	PROVINCIAL RATES OF PAY
SL 11	MEASUREMENTS AND PAYMENT
EXAMPLE	EPWP EMPLOYMENT AGREEMENT

#### SL 01 SCOPE

This project is part of the Expanded Public Works Programme aims to train young people and provide them with practical work experience as part of this programme. Youth aged between 18 and 35 will be recruited and trained in skills relevant to the work to be done on this project. These youth will have to be employed by the contractor as part of this project so that they can gain their work experience on these projects. The training of the youth will be coordinated and implemented by a separate service provider. This service provider will provide the contractor with a list of all the youth and the training each of these youth have received. The Contractor will be required to employ all of these youth for a minimum period of 6 months. Furthermore the Contractor will be required to supervise these youth to ensure that the work they perform is of the required standard. If necessary the contractor's staff will be required to assist and mentor the youth to ensure that they are able to perform the type of work they need to do to the satisfactory standards required. The contractor will not be required to employ all youth in the programme at the same time, but may rotate the youth on the project, as long as all youth are employed for the minimum duration stated earlier.

This specification contains the standard terms and conditions for workers employed in elementary occupations and trained on a Expanded Public Works Programme (EPWP) for the Infrastructure Programme.

#### SL 02 TERMINOLOGY AND DEFINITIONS

#### SL 02.01 TERMINOLOGY

(a) EPWP The Code of Good Practice for Expanded Public Works Programmes, which has been gazetted by the Department of Labour, and which provides for special conditions of employment for these EPWP projects. In terms of the Code of Good Practice, the workers on these projects are entitled to formal training, which will be provided by training providers appointed (and funded) by the Department of Labour. For projects of up to six months in duration, this training will cover life-skills and information about other education, training and employment opportunities.

(b) EPWP Expanded Public Works Programme, a National Programme of the government of South Africa, approved by Cabinet.

(c) UYF Umsobumvu Youth Fund.

(d) DOL Department of Labour.

SL 02.02 DEFINITIONS

(a) "employer" means the contractor or any party employing the worker /

beneficiary under the EPWP Programme.

(b) "client" means the Department of Public Works.

(c) "worker / trainee" means any person working or training in an elementary occupation

on a EPWP.

#### SL 03 APPLICABLE LABOUR LAWS

In line with the Expanded Public Works Programme (EPWP) policies, the Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of labour in government Notice No. R63 of 25 January 2002, of which extracts have been reproduced below in clauses SL 04 shall apply to works described in the scope of work and which are undertaken by unskilled or semi-skilled workers. The Code of Good Practise for Employment and Conditions of Work for Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R64 of 25 January 2002 shall apply to works described in the scope of work and which unskilled or semi-skilled workers undertake.

#### SI 04 EXTRACTS FROM MINISTERIAL DETERMINATION REGARDING EPWP

#### SL 04.01 DEFINITIONS

- (a) "department" means any department of the State, implementing agent or contractor;
- (b) "employer" means any department that hires workers to work in elementary occupations on a EPWP;
- (c) "worker" means any person working in an elementary occupation on a EPWP;
- (d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
- (e) "management" means any person employed by a department or implementing agency to administer or execute a EPWP;
- (f) "task" means a fixed quantity of work;
- (g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
- (h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
- (i) "time-rated worker" means a worker paid on the basis of the length of time worked
- (j) "Service Provider" means the consultant appointed by Department to coordinate and arrange the employment and training of labour on EPWP infrastructure projects.

#### SL 04.02 TERMS OF WORK

- (a) Workers on a EPWP are employed on a temporary basis.
- (b) A worker may NOT be employed for longer than 24 months in any five-year cycle on a EPWP.
- (c) Employment on a EPWP does not qualify as employment and a worker so employed does not have to register as a contributor for the purposes of the Unemployment

#### SL 04.03 NORMAL HOURS OF WORK

- (a) An employer may not set tasks or hours of work that require a worker to work-
  - (i) more than forty hours in any week
  - (ii) on more than five days in any week; and
  - (iii) for more than eight hours on any day.
- (b) An employer and a worker may agree that the worker will work four days per week. The worker may then work up to ten hours per day.

(c) A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks (based on a 40-hour week) allocated to him.

Every work is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

#### SL 04.04 MEAL BREAKS

- (a) A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- (b) An employer and worker may agree on longer meal breaks.
- (c) A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

#### SL 04.05 SPECIAL CONDITIONS FOR SECURITY GUARDS

- (a) A security guard may work up to 55 hours per week and up to eleven hours per day.
- (b) A security guard who works more than ten hours per day must have a meal break of at least one hour duration or two breaks of at least 30 minutes duration each.

#### SL 04.06 DAILY REST PERIOD

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

#### SL 04.07 WEEKLY REST PERIOD

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

#### SL 04.08 WORK ON SUNDAYS AND PUBLIC HOLIDAYS

- (a) A worker may only work on a Sunday or public holiday to perform emergency or security work.
- (b) Work on Sundays is paid at the ordinary rate of pay.
- (c) A task-rated worker who works on a public holiday must be paid -
  - (i) the worker's daily task rate, if the worker works for less than four hours;
  - (ii) double the worker's daily task rate, if the worker works for more than four
- (d) A time-rated worker who works on a public holiday must be paid
  - the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
  - (ii) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

#### SL 04.09 SICK LEAVE

- (a) Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- (b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a
- (c) A worker may accumulate a maximum of twelve days' sick leave in a year.
- (d) Accumulated sick-leave may not be transferred from one contract to another contract.

- An employer must pay a task-rated worker the worker's daily task rate for a day's sick
- An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick (f)
- An employer must pay a worker sick pay on the worker's usual payday.
- Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker
  - absent from work for more than two consecutive days; or
  - absent from work on more than two occasions in any eight-week period. (i)
- A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the (i) duration and reason for incapacity.
- A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

#### MATERNITY LEAVE SL 04.10

- A worker may take up to four consecutive months' unpaid maternity leave.
- A worker is not entitled to any payment or employment-related benefits during maternity leave. (b)
- A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work. (c)
- A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- A worker may begin maternity leave
  - four weeks before the expected date of birth; or (i)
  - (ii)
    - if a medical practitioner, midwife or certified nurse certifies that it is on an earlier date necessary for the health of the worker or that of her unborn child; or (1)
    - if agreed to between employer and worker; or (2)
  - on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her (iii) health.
  - A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
  - A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the EPWP on which she was employed has ended.

#### FAMILY RESPONSIBILITY LEAVE SL 04.11

- Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances
  - when the employee's child is born; (i)
  - when the employee's child is sick; (ii)

- in the event of the death of -(111)
  - the employee's spouse or life partner (1)
  - the employee's parent, adoptive parent, grandparent, child, (2)adopted child, grandchild or sibling

#### STATEMENT OF CONDITIONS SL 04.12

- An employer must give a worker a statement containing the following details at the start of employment
  - the employer's name and address and the name of the EPWP; (i)
  - the tasks or job that the worker is to perform;
  - the period for which the worker is hired or, if this is not certain, the expected (ii) (iii) duration of the contract;
  - the worker's rate of pay and how this is to be calculated; (iv)
  - the training that the worker may be entitled to receive during the EPWP.
- An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- An employer must supply each worker with a copy of the relevant conditions of employment contained in this specification.
- An employer must enter into a formal contract of employment with each employee. A copy of a pro-forma is attached at the end of this specification.

#### KEEPING RECORDS SL 04.13

- Every employer must keep a written record of at least the following
  - the worker's name and position;
  - in the case of a task-rated worker, the number of tasks completed by the (i) (ii) worker;
  - in the case of a time-rated worker, the time worked by the worker; (iii)
  - payments made to each worker. (iv)
- The employer must keep this record for a period of at least three years after the (b) completion of the EPWP.

#### **PAYMENT** SL 04.14

- A task-rated worker will only be paid for tasks that have been completed.
- An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer. Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- A time-rated worker will be paid at the end of each month and payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker. (c)
- Payment in cash or by cheque must take place -(d)
  - at the workplace or at a place agreed to by at least 75% of the workers; and (i)
  - during the worker's working hours or within fifteen minutes of the start or (ii)
- All payments must be enclosed in a sealed envelope which becomes the property of
- An employer must give a worker the following information in writing
  - the period for which payment is made; (i).
  - the number of tasks completed or hours worked; (ii)
  - the worker's earnings; (iii)

- (iv) any money deducted from the payment;
- (v) the actual amount paid to the worker.
- (g) If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.
- (h) If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

#### SL 04.15 <u>DEDUCTIONS</u>

- (a) An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- (b) An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- (c) An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.
- (d) An employer may not require or allow a worker to -
  - repay any payment except an overpayment previously made by the employer by mistake;
  - (ii) state that the worker received a greater amount of money than the employer actually paid to the worker; or
  - (iii) pay the employer or any other person for having been employed.

#### SL 04.16 HEALTH AND SAFETY

- (a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe and that all legal requirements regarding health and safety are strictly adhered to.
- (b) A worker must:
  - work in a way that does not endanger his/her health and safety or that of any other person;
  - (ii) obey any health and safety instruction;
  - (iii) obey all health and safety rules;
  - (iv) use any personal protective equipment or clothing issued by the employer;
  - report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

#### SL 04.17 COMPENSATION FOR INJURIES AND DISEASES

- (a) It is the responsibility of employers to arrange for all persons employed on a EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- (b) A worker must report any work-related injury or occupational disease to their employer or manager.
- (c) The employer must report the accident or disease to the Compensation Commissioner.
- (d) An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

#### SL 04.18 TERMINATION

- (a) The employer may terminate the employment of a worker provided he has a valid reason and after following existing termination procedures.
- (b) A worker will not receive severance pay on termination.
- (c) A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- (d) A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24month period.
- (e) A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

#### SL 04.19 CERTIFICATE OF SERVICE

- (a) On termination of employment, a worker is entitled to a certificate stating -
  - (i) the worker's full name;
  - (ii) the name and address of the employer;
  - (iii) the SPWP on which the worker worked:
  - (iv) the work performed by the worker;
  - (v) any training received by the worker as part of the EPWP;
  - (vi) the period for which the worker worked on the EPWP;
  - (vii) any other information agreed on by the employer and worker.

#### SL 05 EMPLOYER'S RESPONSIBILITIES

The employer shall adhere to the conditions of employment as stipulated in the Code of Good Practice for Employment and Conditions of Work for Expanded Public Works Programmes. Over and above the conditions stipulated above, he shall be responsible to:

- (a) formulate and design a contract between himself/ herself and each of the recruited EPWP beneficiary, ensuring that the contract does not contravene any of the Acts stipulated in South African Law, e.g. Basic Conditions of Employment Act, etc. (A copy of a pro-forma contract is attached at the end of this specification);
- screen and select suitable candidates for employment from the priority list of EPWP beneficiary provided by the Umsobumvu Youth Fund (UYF);
- (c) ensure that the recruited EPWP beneficiary are made available to receive basic life skills training which will be conducted and paid for by the Umsobumvu Youth Fund;
- ensure that all EPWP beneficiary receive instruction on safety on site prior to them commencing with work on site;
- (e) ensure that all EPWP beneficiary are covered under workmen's compensation for as long as they are contracted to the contractor. Payment to the Compensation Commissioner shall be the responsibility of the contractor;
- (f) assist in the identification and assessment of potential EPWP beneficiary to undergo advanced technical training in respective trades;
- (g) test and implement strict quality control and to ensure that the health and safety regulations are adhered to;
- (h) provide all EPWP beneficiary with the necessary protective clothing as required by law for the specific trades that they are involved in.
- provide overall supervision and day-to-day management of EPWP beneficiary and/or sub-contractors; and
- ensure that all EPWP beneficiary are paid their wages on time through a pre-agreed payment method as stipulated in the contract with the EPWP beneficiary.

#### SL 06 PLACEMENT OF RECRUITED EPWP BENEFICIARY

Employers will be contractually obliged to:

- employ EPWP beneficiary from targeted social groups from the priority list provided by the Service Provider/ Umsobumvu Youth Fund.
- facilitate on-the-job training and skills development programmes for the EPWP beneficiary;
- (c) achieve the following minimum employment targets:
  - (i) 55% people between the ages of 18 and 35
  - (ii) 55% women;
  - (iii) 2% people with disabilities.
- (d) brief EPWP beneficiary on the conditions of employment as specified in sub clause SL 04.09 above;
- (e) enter into a contract with each EPWP beneficiary, which contract will form part of the Employment Agreement;
- allow EPWP beneficiary the opportunity to attend life skills training through DOL. This shall be arranged at the beginning of the contract;
- (g) ensure that payments to EPWP beneficiary are made as set out in sub clauses SL 04.14 and SL 04.15 above.
- (h) set up of personal profile files as prescribed by EPWP beneficiary and as set out in sub clause SL 04.13 above.
- (i) in addition to (h)
- a copy of the I.D;
- qualifications;
- career progress;
- EPWP Employment Agreement, and
- list of small trade tools;

must be included in the EPWP beneficiary's personal profile file.

#### SL 07 TRAINING OF EPWP BENEFICIARY

Three types of training are applicable, namely

- · Life skills;
- · On the job training and
- Technical Skills training.

Training will be implemented by training instructors accredited by DOL and/or CETA:

- · EPWP beneficiary shall be employed on the projects for an average of 6 months.
- EPWP beneficiary shall be deployed on projects in the vicinity of their homes. The same arrangements as for other workers regarding accommodation, subsistence and travel shall be applicable to EPWP beneficiary.
- (a) Life skills training

All EPWP beneficiary are entitled to undergo life skills training. Training of this module will be flexible enough to meet the needs of the employer. Training should take place immediately after site hand-over and during the period of site establishment and preplanning before actual construction starts, alternatively this will be spread over the duration of the contract period. The contractor will be required to work closely with the person to schedule the training sessions so that the timing of the training is aligned with the contractors work schedule and his demand for workers.

(b) On-the job training

The Employer shall provide EPWP beneficiary with on-the-job training to enable them to fulfil their employment requirements. The employer shall also be expected to closely monitor the job performance of EPWP beneficiary and shall identify potential EPWP beneficiary for skills development programmes.

(c) Technical skills training

The Employer shall assist in identifying EPWP beneficiary for further training. These EPWP beneficiary will undergo further technical training to prepare them for opportunities as semi-skilled labourers.

Such training will comprise of an off-site theoretical component and practical training on-site. The contractor will be responsible for on-site practical work under his supervision. EPWP beneficiary who graduate from the first phase of the training programme will be identified and given opportunities to register for skills development programmes. These can ultimately result in a accredited qualification. The programme will consist of theoretical instruction away from the construction site as well as on-site practical work under the supervision of the employer. Candidates will be entitled to employment to complete all training modules.

#### SL 08 BENEFICIARY (EPWP BENEFICIARY) SELECTION CRITERIA

#### SL 08.01 PREAMBLE

The Code of Good Practise for Employment and Conditions of Work for Expanded Public Works Programmes encourages:

- optimal use of locally-based labour in a Expanded Public Works Programme (EPWP);
- a focus on targeted groups which consist of namely youth, consisting of women, femaleheaded households, disabled and households coping with HIV/AIDS; and
- the empowerment of individuals and communities engaged in a SPWP through the provision of training.

#### SL 08.02 BENEFICIARY (EPWP BENEFICIARY) SELECTION CRITERIA

- (a) The EPWP beneficiary of the programmes should preferably be non-working individuals from the most vulnerable sections of disadvantaged communities who do not receive any social security pension income. The local community must, through all structures available, be informed of and consulted about the establishment of any EDWP.
- (b) In order to spread the benefit as broadly as possible in the community, a maximum of one person per household should be employed, taking local circumstances into account.
- (c) Skilled artisans from other areas may be employed if they have skills that are required for a project and there are not enough persons in the local communities who have those skills or who could undergo appropriate skills training. However, this should not result in more than 20% of persons working on a programme not being from local communities.
- (d) Programmes should set participation targets for employment with respect to youth, single male- and female-headed households, women, people with disabilities, households coping with HIV/AIDS, people who have never worked, and those in longterm unemployment.
- (e) The proposed targets as set out in sub clause SL 06 (c)
  - 55% youth from 18 to 35 years of age;
  - 55% women;
  - 2% disabled.

#### SL 09 CONTRACTUAL OBLIGATIONS IN RELATION TO YOUTH LABOUR

The EPWP beneficiary to be employed in the programme (EPWP) shall be directly contracted to the employer. Over and above the construction and project management responsibilities, the employer will be expected to perform the tasks and responsibilities as set out in clause SL 05 above.

#### SL 10 PROVINCIAL RATES OF PAY

It is stipulated that youth workers on the EPWP receive a minimum of R 1 000 per month whilst working and R 600 per month whilst on training in ALL provinces. Should EPWP beneficiary be attending training whilst employed by the contractor, the contractor will still be responsible for payment to the EPWP beneficiary whilst at training.

#### SL 11 MEASUREMENTS AND PAYMENT

The number of EPWP beneficiary specified for this contract that will receive life skills training is 50 and technical training is 50

## SL 11.01 PAYMENT FOR TRAINING OF EPWP BENEFICIARY (TARGET:- 5 EPWP BENEFICIARY)

The above item is only applicable if DoL does not fund the Technical Training PRIOR to site handover.

### SL 11.02 PAYMENT FOR TRAVELLING AND ACCOMMODATION DURING OFF-SITE TRAINING

#### SL 11.02.01 Life skills training for 26 days:

01

03

		TATE		
	02	Accommodation(Prov.Sun beneficiary	n)Unit:	R/EPWP
	03	Profit and attendance		Unit: %
SL 11.02.02	Skiil	led development and Technical training:		
	01	Travelling (based on 50 km/EPWP beneficiary)km		Unit:
	02	Accommodation(Prov.St beneficiary		R/EPWP

Travelling (based on 50 km/EPWP beneficiary) .......Unit:

The units of measurement for sub items SL 11.02.01 (01) and SL 11.02.02 (01) above shall be the distance travelled in km by the EPWP beneficiary trained off site. The tendered rate shall include full compensation to safely transport the youth workers to and from the training venue/s.

The unit of measurement for sub items SL 11.02.01 (02) and SL 11.02.02 (02) above shall be the amounts in Rand expended for accommodation and daily meal allowances for the EPWP beneficiary trained off site that must be arranged by the contractor. Amounts quoted shall be corrected according to re-measurement based on actual invoices.

The tendered percentages under sub items St. 11.02.01 (03) and St. 11.02.02 (03) will be paid to the contractor on the value of each payment pertaining to the accommodation and advance meal allowances to cover his expenses in this regard.

SL 11.03	ALTERNATIVE WORKERS FOR THE PERIOD OF OFF-SITE TRAINING
SL 11.03.01	Life skills training for 26 days
SL 11.03.02	Skilled development and Technical training for EPWP beneficiary for () days
	The unit of measurement shall be the number of EPWP beneficiary replaced while in training multiplied by the number of days absent from the site.
	The rates tendered shall include full compensation for additional replacement labour during periods of off-site training.
SL 11.04	EMPLOYMENT OF EPWP BENEFICIARY
	Employment of EPWP beneficiary(Prov.Sum)1/4.Unit: R/ workermonth
SL 11.04.02	Employment of EPWP beneficiary(Prov.Sum)1/4.Unit: R/ workermonth
	The unit of measurement shall be the number of EPWP beneficiary at the statutory labour rates of R multiplied by the period employed in months and the rate tendered shall include full compensation for all costs associated with the employment of EPWP beneficiary and for complying with the conditions of contract. The cost for the training shall be excluded from this item. This item is based on 6 months appointment for EPWP beneficiary.
SL 11.05	PROVISION OF EPWP DESIGNED OVERALLS TO EPWP BENEFICIARY
SL 11.05.01	Supply EPWP designed overalls to EPWP beneficiary (Prov.Sum)Unit: R
	EPWP beneficiary overalls should be orange (top and bottom) as per EPWP specification with the exception of Correctional Services contracts where the EPWP beneficiary top would be blue and the bottom orange.
SL 11.05.02	Profit and attendance
	An amount has been provided in the Schedule of Quantities under sub item SL 10.05.01 for the supply of EPWP designed overalls, as per the specification provided by the EPWP unit, arranged by the Service Provider. The Engineer will have sole authority to spend the amounts or part thereof. The tendered percentage under sub items SL 10.05.02 will be paid to the contractor on the value of each payment pertaining to the supply of overalls to cover his expenses in this regard.
SL 11.06	PROVISION OF SMALL TOOLS FOR EPWP BENEFICIARY
SL 11.06.01	Provide all EPWP beneficiary with prescribed tools for their respective trades. Specification for the mentioned tools to be provided by the EPWP Service Provider. These tools will become the property of the EPWP beneficiary after the completion of the programme(Prov.Sum)Unit: R 500-00 /youth worker
SL 11.06.02	Profit and attendance
SL 11.07	APPOINTMENT OF EPWP BENEFICIARY TEAM LEADER/S
SL 11.07.01	Appointment of () EPWP beneficiary team leader/s for the duration of the contract(Prov.Sum) Unit: R / EPWP beneficiary team leader
	The EPWP beneficiary Team Leader will act as CLO/PLO to facilitate the project work between the EPWP beneficiary and the contractor. Umsobumvu Youth Fund can assist with the sourcing of EPWP beneficiary Team Leader for employment by the contractor.
SL 11.08	LIAISON WITH SERVICE PROVIDER
	The tendered rate shall include full compensation for the cost of liaising with the Service Provider and Social Facilitators on all issues regarding the works.

PAGE	ITEM		[		I	
NO	E .	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1		BILL NO 2				
1		EMPLOYMENT AND TRAINING OF LABOUR ON THE EPWP BENEFICIARY INFRASTRUCTURE PROJECTS				
1		PREAMBLES				
1		Tenderers are advised to study the Additional Specification SL: Employment and training of Labour on the Expanded Public Works Programme (EPWP) Infrastructure Projects as bound elsewhere in the Bills of Quantities and then price this Bill accordingly				
1		TRAINING OF EPWP BENEFICIARY				
1		(TARGET: 5 EPWP BENEFICIARY)				V. Taranta
1	}	Skills development and Technical training:				AAAAA
1	1	Skills development and technical training for EPWP beneficiary for an average of 10 days (ref. SL11.01.01)	ltem	1		
1	2	Penalty due to not meeting the target as in SL 11.01.02	Y/Work	R 2,000.00		The state of the s
1	-	TRAVELLING AND ACCOMMODATION DURING OFF SITE TRAINING:			***************************************	
1		Life skills training for 26 days (ref. SL 11.02.01)				
1	3	Travelling (based on 50km/EPWP beneficiary)	km	250		A CONTRACTOR OF THE CONTRACTOR
1	4	Profit and attendance on Items 1, 2 & 3	%			,
1.		EMPLOYMENT OF EPWP BENEFICIARY				
1	5	Employment of EPWP beneficiary (30 youth) [New Office Block]	Item	1		
1		The unit of measurement shall be the number of EPWP beneficiary at the statutory labour rates of R 160/day multiplied by the period employed in months and the rate tendered shall include full compensation for all costs associated with the employment of EPWP beneficiary and for complying with the conditions of contract. The cost for training shall be excluded from this item. This item is based on 5 months appointment for EPWP beneficiary				
1	6	Employment of EPWP beneficiary(40 youth) [Parking garage]	item	1	1	
	1	TOTAL CARRIED TO SUMMAR	1			

		ANTAGE TO THE PART OF THE PART	UNIT	QUANTITY	RATE	AMOUNT
2		The unit of measurement shall be the number of EPWP beneficiary at the statutory labour rates of R 110/day multiplied by the period employed in months and the rate tendered shall include full compensation for all costs associated with the employment of EPWP beneficiary and for complying with the conditions of contract. The cost for training shall be excluded from this item. This item is based on 12 months appointment for EPWP beneficiary				
2	7	Employment of EPWP beneficiary (30 youth) [Conference Centre & Canteen]	ltem	1		
2		The unit of measurement shall be the number of EPWP beneficiary at the statutory labour rates of R 120/day multiplied by the period employed in months and the rate tendered shall include full compensation for all costs associated with the employment of EPWP beneficiary and for complying with the conditions of contract. The cost for training shall be excluded from this item. This item is based on 12 months appointment for EPWP beneficiary				
2		PROVISION OF EPWP DESIGNED OVERALLS TO YOUTH WORKERS		-		
2	8	Supply EPWP designed overalls to EPWP beneficiary (ref. SL 11.05.01) for 100 workers	Item	1		
2	9	Profit and attendance on Items 5 - 8 (ref. St. 11.05.02)	%	7.5		:
2		PROVISION OF SMALL TOOLS FOR EPWP BENEFICIARY				
2	10	Supply of small tools to EPWP beneficiary. Specification to be supplied by the EPWP-NYS Serviced Provider for the respective trades (ref. SL 11.06.01) for 100 workers	Item	1		100000000000000000000000000000000000000
2	11	Profit and attendance (ref. SL 11.06.02)	%	7.5	,	
2		APPOINTMENT OF YOUTH TEAM LEADERS				
2	12	Appointment of EPWP beneficiary Team Leaders for the duration of the contract (ref. SL 11.07)	ltem	1		1
2	13	Liaison with Service Provider (ref. SL 11.08)	Hrs	30		Addison to the state of the sta
2	14	Profit and attendance on Items 12 & 13	%	7.5	:	
	1	FINAL TOTAL CARRIED TO PRELIMINARY AND GENERAL IN B	ILL OF QU	JANTITIES		

SCOPE OF WORKS IN RESPECT OF WORK RELATING TO THE EXTENDEND PUBLIC WORKS PROGRAMME (EPWP)						
Project title:	WIMS: 071206/000	1: ZNTU 03997 W: NON E EXISTING PERIMETE	IGOMA DISTRICT			
Project Code:	071206/0001	EPWP NO:	N/A			

#### Introductory notes:

- 1. The works, or parts of the works will be constructed using labour-intensive methods only in terms of this specification. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letters L1 are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.
- Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

#### **DESCRIPTION OF THE WORKS**

#### Employer's objectives

The employer's objectives are to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines.

#### Labour-Intensive works

Labour-intensive works comprise the activities described in the Labour-Intensive Specification. Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work.

#### LABOUR-INTENSIVE COMPETENCIES OF SUPERVISORY AND MANAGEMENT STAFF

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C), at NQF outlined in Table 1. (See GUIDELINES FOR THE IMPLEMENTATION OF LABOUR-INTENSIVE INFRASTRUCTURE PROJECTS UNDER THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP) -THIRD EDITION 2015)

Emerging contractors shall have personally completed, or be registered on a skills programme for the NQF level 2 unit standard. All other site supervisory staff in the employ of emerging contractors must have completed, or be registered on a skills programme for the NQF level 2 unit standards or NQF level 4 unit standards. Table 1: Skills programme for supervisory and management staff.

Table 1: Skills programme for supervisory and management staff

lable 1: Skills programme for supervisory and management stall						
Personnel	NQF level	Unit standard titles	Skills programme description			
Team leader / supervisor	2	Apply Labour-Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and			
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage				
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	any one of these 3 unit standards			

		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain structures	
Personnel	NQF level	Unit standard titles	Skills programme description
Foreman/supervisor	4	Implement Labour-Intensive Construction Systems and Techniques	This unit standard must be completed, and
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water an Sanitation Services	any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain structures	
Site Agent /Manager (i.e. the contractor's most senior representative that is resident on the site)	5	Manage Labour-Intensive Construction Processes	Skills Programme against this single unit standard
Details of these skills p tel: 011-265 5900)	rogrammes n	nay be obtained from the CETA ETQA ma	nager (e-mail :gerard@ceta.co.za ,

#### EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR-INTENSIVE WORKS

- 1.1 Requirements for the sourcing and engagement of labour.
- 1.1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.
- 1.1.2 The rate of pay set for the SPWP per task or per day will be an acceptable rate determined by the Department of Labour.
- 1.1.3 Tasks established by the contractor must be such that:
  - a) the average worker completes 5 tasks per week in 40 hours or less; and
  - b) the weakest worker completes 5 tasks per week in 55 hours or less.
- 1.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.
- 1.1.5 The Contractor shall, through all available community structures, inform the local community of the labour
  - a) where the head of the household has less than a primary school education;
  - b) that have less than one full time person earning an income;
  - c) where subsistence-agriculture is the source of income.
  - d) that who are not in receipt of any social security pension income
- 1.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of unskilled and semi-skilled workers is in the following proportions:
  - a) 55% women;
  - b) 55% youth who are between the ages of 18 and 35; and
  - c) 2% on persons with disabilities.
- 1.2 Specific provisions pertaining to SANS 1914-5
  - 1.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

- 1.2.2 Contract participation goals
  - 1.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.
  - 1.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

1.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

1.2.4 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

#### 1.2.5 Variations to SANS 1914-5

1.2.5.1 The definition for net amount shall be amended as follows:

Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

1.2.5.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

#### 1.3 Training of targeted labour

- 1.3.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
- 1.3.2 The cost of the formal training of targeted labour, will be funded by the local office of the Department of Labour. This training will take place as close to the project site as practically possible. The contractor must access this training by informing the relevant regional office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The Employer and the Department of Public Works (Fax: 012 3258625/ EPWP Unit, Private Bag X65, Pretoria 0001) must be furnished with a copy of this request.
- 1.3.3 The contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.
- 1.3.4 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of the above.
- 1.3.5 Proof of compliance with the above requirements must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

#### GENERIC LABOUR-INTENSIVE SPECIFICATION

#### 1 Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- a) trenches having a depth of less than 1.5 metres
- b) storm water drainage
- c) low-volume roads and sidewalks

#### 2 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

#### Hand excavateable material

Hand excavateable material is material:

#### a) Granular materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

#### b) Cohesive materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note:

- 1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
- 2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of, 60 degrees with respect to the horizontal) into the material being used.

Table 2: Consistency of materials when profiled						
GRANULAR MATERIALS COHESIVE MATERIALS						
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION			

Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in upto 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of a geological pick; requires many blows for excavation.	stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail' with difficulty; slight indentation produced by blow of a geological pick point.

#### 4 Trench excavation

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

#### 5 Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

- a) to 90% Proctor density;
- such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
- such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

#### 6 Excavation

All hand excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

#### 7 Clearing and grubbing

Grass and small bushes shall be cleared by hand.

#### 8 Shaping

All shaping shall be undertaken by hand.

#### 9 Loading

All loading shall be done by hand, regardless of the method of haulage.

#### 10 Hau

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

#### 11 Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haviage.

#### 12 Spreading

All material shall be spread by hand.

#### 13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

#### 14 Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

#### 5 Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

### 16 Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper handhold on them.

(Insert Your Company Logo)
(This shall serve as the cover page on employment contracts for local labour)
EMPLOYMENT AGREEMENT
BETWEEN
[CONTRACTOR NAME]
AND
[WORKER NAME]

PART	TES	
The F	Parties to this Agreement a	re -
1.1.	Contractor:	
	herein represented by:	
	duly authorised thereto	
		And
1.2.	Mr / Me:	[worker's name]
DEFII	NITIONS AND INTERPRE	
2.1.		any Annexure thereto, unless inconsistent with or otherwise indicated by the
	"Agreement"	means the contents of this Agreement.
	"Company"	means the company that employs the worker
	"Department"	means the Department of Public Works
	"Worker"	is a person that performs a specific or necessary task or who completes tasks in a certain way
	"EPWP"	The Expanded Public Works Programme is a government programme aimed at the alleviation of poverty and unemployment. The programme ensures the full engagement on Labour Intensive Methods of Construction (LIC) to contractors for skills development. The EPWP focuses at reducing unemployment by increasing economic growth by means of improving skills levels through education and training and improving the enabling environment for the industry to flourish.
PURI	POSE	
The p	ourpose of this agreement	is to:-
Ensu	re that the agreement is	binding to both the Worker and the Employer.
TERM	MS AND CONDITIONS	
8	The worker will have no	entitlement to the benefits of a full time employee, namely;
۰	The worker should not	have the expectation that this contract will be renewed or extended.
٥	The worker will be subj	ect to all laws, rules, policies, codes and procedures applicable to the;
0	The worker must meet	the standards and requirements of the contractor

5. REMUNERATION

2.

3.

The worker must render his/her services during normal working hours of minimum of forty to fifty five hours in any week; which comprise of an eight-hour working day in a five-day week.

		orker will receive compensation to the amount of R00 which must be paid by or on the last day of each month.
6.	ROLE	S AND RESPONSIBILITIES
	6.1	Employer / Worker
	o	Work for in terms of the period as specified in the employment agreement contract.
	٥	Be available for and participate in all learning and work experience required by the company.
	0	Comply with workplace policies and procedures.
	o	Complete any attendance or any written assessment tools supplied by the contractor to record relevant workplace experience.
	0	Demonstrate willingness to grow and learn through work experience.
		Provide the following documentation to the employer,
		<ul> <li>Certified identity document not longer than 3 months</li> </ul>
		ID size photos
		Sign employment contract
	6.2	Employer
	o	Employ the worker for a period specified in the agreement.
	۰	Provide the worker with appropriate work based experience in the work environment.
	۰	Facilitate payments of wages / stipends.
	o	Keep accurate records of workers.
	o	Where a worker/ learner is disabled, the employer will have to provide in the additional needs e.g. special materials, learning aids and in some cases physical or professional support (such aids remain the property of the employer).
•	٥	Keep up to date records of learning and discuss progress with the intern on a regular basis.
	٠	Apply fair disciplinary, grievance and dispute resolution procedures to the worker.
	٥	Prepare an orientation/ induction course to introduce worker/ learner to the workplace and specific workplace requirements.
	o	Ensure the daily attendance register is signed by the worker.
7.	DURA	TION.
	This a	greement commences on;
	and	
	expire	es on:
Ω	DDEA	CH

If either party commits any breach of the terms of this contract (and fails to rectify it within 30 days of receipt of a written notice calling it to do so, then) the other party shall be entitled to terminate the contract or to claim specific performance without prejudice to any of its other legal rights, including its rights to claim damages.

# 9. CONDITIONS OF EMPLOYMENT

### 9.1. Meal Breaks

- 9.1.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- 9.1.2 An employer and worker may agree on longer meal breaks.
- 9.1.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- 9.1.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.
- 9.2. Special Conditions for Security Guards (Only applicable to security Guards)
- 9.2.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
- 9.2.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

### 9.3. Weekly Rest Period

1 )

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

# 9.4. Work on Sundays and Public Holidays

- 9.4.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.
- 9.4.2 Work on Sundays is paid at the ordinary rate of pay.
- 9.4.3 A task-rated worker who works on a public holiday must be paid;
  - (a) the worker's daily task rate, if the worker works for less than four hours;
  - (b) double the worker's daily task rate, if the worker works for more than four hours.
- 9.4.4 A time-rated worker who works on a public holiday must be paid
  - (a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
  - (b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

### 9.5 Sick leave

- 9.5.1 Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.
- 9.5.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- 9.5.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
- 9.5.4 Accumulated sick-leave may not be transferred from one contract to another contract.
- 9.5.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

KZN Department of Public Works Effective Date:16 JANUARY 2023 Revision 9

Page 5 of 10

- 9.5.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- 9.5.7 An employer must pay a worker sick pay on the worker's usual payday.
- 9.5.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is
  - (a) absent from work for more than two consecutive days; or
  - (b) absent from work on more than two occasions in any eight-week period.
- 9.5.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
- 9.5.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

### 9.6. Maternity Leave

- 9.6.1 A worker may take up to four consecutive months' unpaid maternity leave.
- 9.6.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 9.6.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 9.6.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- 9.6.5 A worker may begin maternity leave as follows;
  - (a) four weeks before the expected date of birth; or
  - (b) on an earlier date
    - (i) If a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
    - (ii) if agreed to between employer and worker; or
  - (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- 9.6.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

# 9.7. Family responsibility leave

- 9.7.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances;
  - (a) when the employee's child is born;
  - (b) when the employee's child is sick;
  - (c) in the event of a death of
    - (i) the employee's spouse or life partner;
    - (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

### 9.8. Keeping Records

- 9.8.1 Every employer must keep a written record on site for the duration of the project and three (3) year after completion records should consists of at least the following;
  - (a) the worker's name and position;
  - (b) copy of an acceptable worker identification
  - in the case of a task-rated worker the number of tasks completed by the worker;
  - (d) in the case of a time-rated worker, the time worked by the worker;
  - (e) payments made to each worker in a form of Proof of Payment, Payroll registers and the acknowledgement of payment receipt signed by the worker.
- 9.8.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.
- 9.9. Payment
- 9.9.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- 9.9.2 A worker may not be paid less than the Ministerial Determination wage rate.
- 9.9.3 A task-rated worker will only be paid for tasks that have been completed.
- 9.9.4 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.
- 9.9.5 A time-rated worker will be paid at the end of each month.
- 9.9.6 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- 9.9.7 Payment in cash or by cheque must take place
  - (a) at the workplace or at a place agreed to by the worker;
  - (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
  - (c) in a sealed envelope which becomes the property of the worker.
- 9.9.8 An employer must give a worker the following information in writing
  - (a) the period for which payment is made;
  - (b) the numbers of tasks completed or hours worked;
  - (c) the worker's earnings;
  - (d) any money deducted from the payment;
  - (e) the actual amount paid to the worker.
- 9.9.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.
- 9.9.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

### 9.10. Inclement weather

if no work has begun on site, and if an employee has reported for work, the employee will be paid for four hours. Should work be stopped after the first four hours, the employee will be paid for the hours worked. Where the employer has given employees notice on the previous working day that no work will be available due to inclement weather, then no payment will be made.

### 9.11. Deductions

- 9.11.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- 9.11.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- 9.11.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement of Law; court order or arbitration
- 9.11.4 It is the responsibility of the employers to arrange for all persons employed on a Project to be covered in terms of the Unemployment Insurance Fund Contributions Act, 2002 (Act No. 4 of 2002)
- 9.11.5 An employer may not require or allow a worker to
  - (a) repay any payment except an overpayment previously made by the employer by mistake;
  - (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
  - (c) pay the employer or any other person for having been employed.

# 9.12. Health and Safety

- 9.12.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- 9.12.2 A worker must;
  - (a) work in a way that does not endanger his/her health and safety or that of any other person;
  - (b) obey any health and safety instruction;
  - (c) use any personal protective equipment or clothing issued by the employer;
  - (d) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

# 9.13. Compensation for injuries and Diseases

- 9.13.1 It is the responsibility of the employers to arrange for all persons employed on a Project to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993 as amended by COIDA Act 61, 1997.
- 9.13.2 A worker must report any work-related injury or occupational disease to their employer or manager.
- 9.13.3 The employer must report the accident or disease to the Compensation Commissioner.
- 9.13.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

1	
0 1/1	Termination

- 9.14.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 9.14.2 A worker will not receive severance pay on termination.
- 9.14.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- 9.14.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available.
- 9.14.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available.

Notice procedure is as follows;

- One week if employed for four weeks or less
- Two weeks if employed for more than four weeks but not more than a year
- Four weeks of employed for one (1) year or more

# 9.15. Certificate of Service

- 9.15.1 On termination of employment, a worker is entitled to a certificate stating;
  - the worker's full name;
  - the name and address of the employer, (b)
  - the Project on which the worker worked; the work performed by the worker; (c)
  - any training received by the worker; (d)
  - the period for which the worker worked on the Project; and (e)
  - any other information agreed on by the employer and worker. (f)

# 9.16. DOMICILE

The address to which notices and all legal documents may be delivered or served are as follows:

The address to which holices and all leg	at documento may be delivered
Employee Details	
Name & Surname:	
ID No:	
Residential Address:	
Contact No:	
Date of Employment:	
To be supervised by:	Main Contractor: or Sub Contractor:
Category of employment:	Skilled: Semi-skilled: Unskilled:
For Skilled & Semi-skilled state the t	rade:
	il when your services are still required on site
I confirm that I have been inducted a	and fully understand the condition of my appointment.
Employee Signature:	William by COBIOLO
	Signature by Witness:
Employer Details	
Name & Surname:	

KZN Department of Public Works	
Effective Date:16 JANUARY 2023	
Revision 9	

(		
Designation:		
Contact No:	Signature:	



FRIDAY

Total Days worked









# ARTMENT EXPANDED PUBLIC WORKS PROGRAMME

# The Attendance Register for on-site Workers Cell No: Reporting month: First Name: Surname: WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING Project Name: PERIMETER SECURITY FENCE Tender No ZNTU 03997 W Project Code: 071206/0001 **IDENTITY NUMBER:** Report On Any Formal Training Date Signature Time Out Signature Time In Day Provided In The Reporting Month WEEK 1 MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY WEEK 2 MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY WEEK 3 MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY WEEK 4 MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY WEEK 5 MONDAY TUESDAY WEDNESDAY THURSDAY

BUSINESS PLAN	
Reference No	
Profile ID	
Project Name	
Project Details	
Project Name	
Project Reference Number	
Project description	
Project Start Date	
Project End Date	
Estimated Budget	
Project Location	
Province	
District/Metro Municipality	
Local Municipality/Metro Region	
Latitude (in decimal format)	
Longitude (in decimal format)	
Public Body Details	
porting public body that is the project owner (and will report on the project)	
Implementing public body type	
Public body that will implement the project	
IDP reference number allocated to the project	
EPWP Details	
EPWP Sector	
EPWP Program	
EPWP Sub programme	
Budget Amount	
April 2014/March 2015	
April 2015/March 2016	
Total Budget Amount	
***************************************	
Wages UIF	
GOIDA	
Training	
Administration	
Equipment and materials	
jer Describe other	
Outputs and Training	
Output	
Despription	
Target Quantity	
Number of persons to be trained	
Contact person	
Title	
Initials	
First Name	
Surname	
Email	
Tel (Office)	
Fax Number	
Cell Number	
Physical Address 1	
Physical Address 2	
Physical Address 3	
Physical Address 4	
Postal Address 1	

Postal Address 2	
Postal Address 3	
Postal Address 4	

1 }

Monthly Data collection for LOCAL Labour KZN PUBLIC WORKS

Name of Contractor:

Name of Project:

WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE

KAN KWEDILI-MATAL PROTINCE

Project Code:

Reporting month;

071206/0001

COAMICE PUBLIC WORKS PROCEAMANT

Project location name (area):\_

Project location (Ward No.);

अरहणवामडि स्ट्रांच No. of Children Household ក់ strashnagad to .oហ ni olgeopie in Housekold Nationality Location Details
Ward Cell No. N Address Highest Level of Education Education Level (See Codes below) Other Language (5) Grado 5-6 (5td 3-4) ABET 2 (7) Grado 9 (5td 7) ABET 4 (9) Grado 12 (5td 10) (6) Grado 7-9 (5td 5-6) ABET 3 (8) Grado 10-11 (5td 8-9) (10) Post Matric Other 17 (1/1/17) Are you recelving any (N/A) Registered with COIDA T(U no basafsigaR (N/Y) Job description Total days worked End Date on the current month Education Levels – use the cocies (1,23) on the excel spreadch:
(1) Unknor (3) Grade 1-3 (Sub A – Std 1)
(2) No Sci (4) Grado 4 (Std 2) ABET 1 Start
Date on
the
current
month Disability Y/N Gender F/M D,0.B 0 0 10 number Sumame leitini First Name ž

EPWP Official sign: Designation: Date: DPW Official/Consultant sign: Designation; Contact no: Date:

Contractor sign: Designation:

Contact nor Date:

# KZN PUBLIC WORKS

( )

# Worker payment capture form for LOCAL Labour

Name of Contractor:

Name of Project:

KWAZJILU-NATAL PROVINCE	PUBLIC WORKS REPUBLIC OF SOUTH AFRICA



071206/0001

Project Code:

Reporting month:

**EXISTING PERIMETER SECURITY FENCE** NONGOMA DISTRICT OFFICE: REPLACE WIMS: 071206/0001: ZNTU 03997 W:

	Total days Worked Days										
•	Total Paid Total Amount Worked Days Paid Days										ıl cion.
	Total Paid Days							Ē			EDIAID Official sign.
	Daily Wage Rate										
	Job Description										
Payment Upload	D.O.B										
Payme	Identity No.										
	Surname										
•	Initials										
	First Name	The state of the s	errereikija ir i i transcrivija ir i								
	ž		21	ო	4	ic.	ی (د	) <u> </u>	 ത	5	İ

Contractor sign:	DPW Offic
Designation:	Designatio
Date:	Date:
Contact no:	Contact no

ial/Consultant sign:\_

Designation:\_ Contact no: Date:\_\_



071206/0001

Worker Training capture form for LOCAL Labour ZN PUBLIC WORKS

Name of Contractor: Name of Project:

ž

WIMS: 071206/0001: ZNTU 03997 W: NONGOMA DISTRICT OFFICE: REPLACE EXISTING PERIMETER SECURITY FENCE

Reporting month:

Name of Training Provider Is training complete or on - going Cost per trainee Total Number of Training Days EPWP Official sign: Training Days Not Paid Designation: Training Days Paid End date on current month Start date on current month Training Was training
Accredited or
Non - accredited
by a relevant
SETA DPW Official/Consultant sign: \_\_ Course Name Designation: Job description ON Q Sumame Contractor sign: Name

Contact no:

Contact not

Date:

Designation:

3

9

Date:

Date:

# Location

Locality Name	
Municipality	
Subplace	
Ward	
Government Facility	
Latitude	
Longitude	
Physical Address/Location	