



agriculture & rural development

Department:
agriculture
& rural development
PROVINCE OF KWAZULU-NATAL

KWAZULU-NATAL DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

BID No: DARD 17/20A

DESCRIPTION OF SERVICE:

APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF CONCRETE BUTTRESS WEIR, AGRICULTURAL SUBSURFACE DRAINAGE, VEHICLE CULVERT CROSSINGS AND REMEDIAL REPAIRS ON EXISTING CONCRETE STORMWATER CANAL. MAKHATHINI IRRIGATION SCHEME BLOCK 6A

NAME OF BIDDER: _____

PREQUALIFICATION CRITERIA

Only tenderers who meet the following prequalification criteria may respond: -

- (i) BBEE Level 1 (as per the provisions of section 4(1) (a) of the PPPFA Regulations, 2017); and**
- (ii) EME or QSE (as per the provisions of section 4(1) (b) of the PPPFA Regulations, 2017)**
- (iii) Minimum CIDB grading 7CE**

Return of Bid:

Bids must be deposited in the bid box situated at Department of Agriculture and Rural Development, Supply Chain Management, 1 Cedara Road, Cedara, 3200 or send by post to The Director: Supply Chain Management, Private Bag X9059, Pietermaritzburg, 3200.

Tel: **(033) 355 9109 / 082 925 8396** before **11:00 am** on the closing date: **10 September 2020**

Issued by:

The Department of Agriculture and Rural Development
1 Cedara Road
Cedara
3200

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PART A
INVITATION TO BID

SBD1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)

BID NUMBER:	DARD17/20A	CLOSING DATE:	10/09/2020	CLOSING TIME:	11:00 AM
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DESCRIPTION	APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF CONCRETE BUTTRESS WEIR, AGRICULTURAL SUBSURFACE DRAINAGE, VEHICLE CULVERT CROSSINGS AND REMEDIAL REPAIRS ON EXISTING CONCRETE STORMWATER CANAL. MAKHATHINI IRRIGATION SCHEME BLOCK 6A
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BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

Bid must be deposited in the bid box situated at Department of Agriculture and Rural Development
Supply Chain Management
1 Cedara Road
Cedara, 3200

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO	TECHNICAL ENQUIRIES MAY BE DIRECTED TO:
---	--

CONTACT PERSON	Ms Nozizwe Makaula	CONTACT PERSON	Mr Tekiso Mantje
TELEPHONE NUMBER	033 355 9109	TELEPHONE NUMBER	082 859 6562
FACSIMILE NUMBER	n/a	FACSIMILE NUMBER	n/a
E-MAIL ADDRESS	nozizwe.makaula@kzndard.gov.za	E-MAIL ADDRESS	

SUPPLIER INFORMATION

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	

[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3]
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QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? YES NO

DOES THE ENTITY HAVE A BRANCH IN THE RSA? YES NO

DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? YES NO

DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? YES NO

IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? YES NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:

**SPECIAL INSTRUCTIONS AND NOTICES TO BIDDERS REGARDING THE
COMPLETION OF BIDDING FORMS**

PLEASE NOTE THAT THIS BID IS SUBJECT TO TREASURY REGULATIONS 16A ISSUED IN TERMS OF THE PUBLIC FINANCE MANAGEMENT ACT, 1999, THE KWAZULU-NATAL SUPPLY CHAIN MANAGEMENT POLICY FRAMEWORK AND THE GENERAL CONDITIONS OF CONTRACT.

1. Unless inconsistent with or expressly indicated otherwise by the context, the singular shall include the plural and vice versa and with words importing the masculine gender shall include the feminine and the neuter.
2. Under no circumstances whatsoever may the bid forms be retyped or redrafted. Photocopies of the original bid documentation may be used, but an original signature must appear on such photocopies.
3. The bidder is advised to check the number of pages and to satisfy himself that none are missing or duplicated.
4. Bids submitted must be complete in all respects.
5. Bids shall be lodged at the address indicated not later than the closing time specified for their receipt, and in accordance with the directives in the bid documents.
6. Each bid shall be addressed in accordance with the directives in the bid documents and shall be lodged in a separate sealed envelope, with the name and address of the bidder, the bid number and closing date indicated on the envelope. The envelope shall not contain documents relating to any bid other than that shown on the envelope. If this provision is not complied with, such bids may be rejected as being invalid.
7. All bids received in sealed envelopes with the relevant bid numbers on the envelopes are kept unopened in safe custody until the closing time of the bids. Where, however, a bid is received open, it shall be sealed. If it is received without a bid number on the envelope, it shall be opened, the bid number ascertained, the envelope sealed and the bid number written on the envelope.
8. A specific box is provided for the receipt of bids, and no bid found in any other box or elsewhere subsequent to the closing date and time of bid will be considered.
9. No bid sent through the post will be considered if it is received after the closing date and time stipulated in the bid documentation, and proof of posting will not be accepted as proof of delivery.
10. No bid submitted by telefax, telegraphic or other electronic means will be considered.
11. Bidding documents must not be included in packages containing samples. Such bids may be rejected as being invalid.
12. Any alteration made by the bidder must be initialed.
13. Use of correcting fluid is prohibited
14. Bids will be opened in public as soon as practicable after the closing time of bid.
15. Where practical, prices are made public at the time of opening bids.
16. If it is desired to make more than one offer against any individual item, such offers should be given on a photocopy of the page in question. Clear indication thereof must be stated on the schedules attached.

PRICING SCHEDULE

NAME OF BIDDER:

CLOSING TIME: **11h00**CLOSING DATE: **10 September 2020**

OFFER TO BE VALID FOR 120 DAYS FROM THE CLOSING DATE OF BID.

BID NUMBER	DESCRIPTION	TOTAL BID PRICE IN RSA CURRENCY *(All applicable taxes included)
DARD 17/20A	APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF CONCRETE BUTTRESS WEIR, AGRICULTURAL SUBSURFACE DRAINAGE, VEHICLE CULVERT CROSSINGS AND REMEDIAL REPAIRS ON EXISTING CONCRETE STORMWATER CANAL. MAKHATHINI IRRIGATION SCHEME BLOCK 6A	

Official Company
Stamp

Signature

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

2.1 Full Name of bidder or his or her representative:

2.2 Identity Number :.....

2.3 Position occupied in the Company (director, trustee, shareholder²):

2.4 Company Registration Number:

2.5 Tax Reference Number:

2.6 VAT Registration Number:

2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.

¹"State" means –

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

²"Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

2.7 Are you or any person connected with the bidder presently employed by the state?

YES / NO

2.7.1 If so, furnish the following particulars:

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?

YES / NO

2.7.2.1 If yes, did you attached proof of such authority to the bid document?

YES / NO

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:

.....
.....
.....

2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months?

YES / NO

2.8.1 If so, furnish particulars:

.....
.....
.....

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?

YES / NO

2.9.1 If so, furnish particulars.

.....
.....
.....

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?

YES/NO

2.10.1 If so, furnish particulars

.....
.....
.....

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable;

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- (a) “**B-BBEE**” means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) “**B-BBEE status level of contributor**” means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) “**bid**” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) “**Broad-Based Black Economic Empowerment Act**” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) “**EME**” means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) “**functionality**” means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) “**prices**” includes all applicable taxes less all unconditional discounts;
- (h) “**proof of B-BBEE status level of contributor**” means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) “**QSE**” means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 or **90/10**

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

- P_s = Points scored for price of bid under consideration
- P_t = Price of bid under consideration
- P_{\min} = Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

6.1 B-BBEE Status Level of Contributor: . =(maximum of 20 points)
 (Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

.....

8.6 COMPANY CLASSIFICATION

- Manufacturer
- Supplier
- Professional service provider
- Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 Total number of years the company/firm has been in business.....

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES	
1.
2.

.....	
SIGNATURE(S) OF BIDDERS(S)	
DATE:
ADDRESS

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 makes provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp at no cost.

1.6 A bid may be disqualified if –

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;
 - 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);
 - 2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
 - 2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
 - 2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
 - 2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour or intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
 - 2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
 - 2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and
 - 2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
- 3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:**

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %

4. Does any portion of the services, works or goods offered have any imported content?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

5.1. If yes, provide the following particulars:

- (a) Full name of auditor:
- (b) Practice number:
- (c) Telephone and cell number:
- (d) Email address:

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

6. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Institution):

.....

NB

1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thdti.gov.za/industrialdevelopment/ip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder entity),
the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
 - (ii) the declaration templates have been audited and certified to be correct.
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula

given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

(d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

CONTRACT FORM - RENDERING OF SERVICES
PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I..... in my capacity As..... accept your bid under reference numberdated.....for the rendering of services indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

4. I confirm that I am duly authorised to sign this contract.

SIGNED ATON.....

NAME (PRINT)

SIGNATURE
 OFFICIAL STAMP

WITNESSES

1

2

.....

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Standard Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be disregarded if that bidder, or any of its directors have-
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system; or
 - c. failed to perform on any previous contract.
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		+

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

.....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregards the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signature

Date

Position

Name of Bidder

AUTHORITY TO SIGN A BID

A. COMPANIES

If a Bidder is a company, a certified copy of the resolution by the board of directors, personally signed by the chairperson of the board, authorising the person who signs this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the company must be submitted with this bid, that is before the closing time and date of the bid

AUTHORITY BY BOARD OF DIRECTORS

By resolution passed by the Board of Director.....20.....,

Mr/Mrs.....

(whose signature appears below) has been duly authorised to sign all documents in connection with this bid on behalf of

(Name of Company)

IN HIS/HER CAPACITY AS:

SIGNED ON BEHALF OF COMPANY:

.....
(PRINT NAME)

SIGNATURE OF SIGNATORY: **DATE:**

WITNESSES: 1.....

2.....

B. SOLE PROPRIETOR (ONE - PERSON BUSINESS)

I, the undersigned..... hereby confirm that I am the sole owner of the business trading as.....

SIGNATURE..... **DATE**.....

C. PARTNERSHIP

The following particulars in respect of every partner must be furnished and signed by every partner:

Full name of partner	Residential address	Signature
.....
.....
.....

We, the undersigned partners in the business trading as.....hereby authoriseto sign this bid as well as any contract resulting from the bid and any other documents and correspondence in connection with this bid and /or contract on behalf of

.....
SIGNATURE **SIGNATURE** **SIGNATURE**

.....
DATE **DATE** **DATE**

D. CLOSE CORPORATION

In the case of a close corporation submitting a bid, a certified copy of the Founding Statement of such corporation

shall be included with the bid, together with the resolution by its members authorising a member or other official of

the corporation to sign the documents on their behalf.

By resolution of members at a meeting on 20.....

at..... Mr/Ms....., whose signature

appears below, has been authorised to sign all documents in connection with this bid on behalf of

(Name of Close Corporation)

.....

SIGNED ON BEHALF OF CLOSE CORPORATION:

.....
(PRINT NAME)

IN HIS/HER CAPACITY AS **DATE:**

SIGNATURE OF SIGNATORY:

WITNESSES: 1.....

2.....

E CO-OPERATIVE

A certified copy of the Constitution of the co-operative must be included with the bid, together with the resolution by its members authoring a member or other official of the co-operative to sign the bid documents on their behalf.

By resolution of members at a meeting on 20.....

at.....

Mr/Ms....., whose signature appears below, has been authorised to sign all documents in connection with this bid on behalf of (Name of cooperative)

SIGNATURE OF AUTHORISED REPRESENTATIVE/SIGNATORY:

IN HIS/HER CAPACITY AS:

DATE:

SIGNED ON BEHALF OF CO-OPERATIVE:

NAME IN BLOCK LETTERS:

WITNESSES: 1.....

2.....

F JOINT VENTURE

If a bidder is a joint venture, a certified copy of the resolution/agreement passed/reached signed by the duly authorised representatives of the enterprises, authorising the representatives who sign this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the joint venture must be submitted with this bid, before the closing time and date of the bid.

AUTHORITY TO SIGN ON BEHALF OF THE JOINT VENTURE

By resolution/agreement passed/reached by the joint venture partners on.....20...

Mr/Mrs.....,Mr/Mrs.....

Mr/Mrs.....and Mr/Mrs.....

(whose signatures appear below) have been duly authorised to sign all documents in connection with this bid on behalf of:(Name of Joint Venture)

IN HIS/HER CAPACITY AS:

SIGNED ON BEHALF OF (COMPANY NAME):
(PRINT NAME)

SIGNATURE: DATE:

IN HIS/HER CAPACITY AS:

SIGNED ON BEHALF OF (COMPANY NAME):
(PRINT NAME)

SIGNATURE: DATE:

IN HIS/HER CAPACITY AS:

SIGNED ON BEHALF OF (COMPANY NAME):
(PRINT NAME)

SIGNATURE: DATE:

IN HIS/HER CAPACITY AS:

G. CONSORTIUM

If a bidder is a consortium, a certified copy of the resolution/agreement passed/reached signed by the duly authorised representatives of concerned enterprises, authorising the representatives who sign this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the consortium must be submitted with this bid, before the closing time and date of the bid.

AUTHORITY TO SIGN ON BEHALF OF THE CONSORTIUM

By resolution/agreement passed/reached by the consortium on.....20.....

Mr/Mrs.....

(whose signature appear below) have been duly authorised to sign all documents in connection with this bid on behalf of:

(Name of Consortium)

IN HIS/HER CAPACITY AS:

SIGNATURE: **DATE:**

PART B

GENERAL CONDITIONS OF CONTRACT

DEFINITIONS: The following terms shall be interpreted as indicated:

- (a) "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
- (b) "Contract" means the written agreement entered into between the Province and the Contractor, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- (c) "Contract price" means the price payable to the Contractor under the contract for the full and proper performance of his contractual obligations.
- (d) "Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
- (e) "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- (f) "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognised new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- (g) "Day" means calendar day.
- (h) "Delivery" means delivery in compliance with the conditions of the contract or order.
- (i) "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- (j) "Delivery into consignees store or to his site" means delivery and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the Contractor bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
- (k) "Dumping" occurs when a private enterprise abroad market its goods and services on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
- (l) "Force majeure" means an event beyond the control of the Contractor and not involving the Contractor's fault or negligence and not foreseeable. Such event may include, but is not restricted to, acts of the Province in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- (m) "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 bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.

- (n) "GCC" means the General Conditions of Contract.
- (o) "Goods" means all the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- (p) "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the Contractor or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic, where supplies covered by the bid will be manufactured.
- (q) "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- (r) "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- (s) "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- (t) "Project site" where applicable, means the place indicated in bidding documents.
- (u) "Province" means the procuring Department, incorporating the KwaZulu-Natal Provincial Legislature.
- (v) "Republic" means the Republic of South Africa.
- (w) "SCC" means the Special Conditions of Contract.
- (x) "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the Contractor covered under the contract.
- (y) "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.

1. CESSION OF CONTRACTS

- 1.1 The Contract is personal to the Contractor who shall not sub-let, assign, cede or make over the Contract or any part thereof, or any share of interest therein, to any other person without the written consent of the Province, and on such conditions as it may approve.
- 1.2 This sub-clause shall not apply to sub-contracts given to regular suppliers of the Contractor for materials and minor components relating to the goods or services supplied. The Province reserves the right to require the Contractor to submit, for noting, the names of such sub-contractors in order to ascertain their registration on the Provincial Suppliers Database and they must be legal entities.

2. DISCREPANCIES

Should there appear to be any discrepancies, ambiguities or want of agreement in description, dimensions, qualities or quantities in the Contract, the Contractor shall be obliged to refer the matter to the Provinces' Representative for a decision, before proceeding to execute the Contract or part thereof in respect of which the said discrepancies, ambiguities or want of agreement appear to exist.

3. QUALITY AND GUARANTEE

- 3.1 All Goods supplied shall be equal in all respects to samples, patterns or specifications where such are provided. Any changes to quality or brands will have to be approved by the Province, as this is a change to the conditions of the contract.
- 3.2 Should the Province, after the award of the Contract and/or during the manufacture of the goods specified, decide on a variation or alteration to the specification, either at the suggestion of the Contractor or otherwise, which will be to the Province's advantage, such variation or alteration shall be performed to the Province's satisfaction. Any variation in the Contract Price arising there from shall be subject to agreement between the Province and the Contractor.
- 3.3 The Contractor shall not be relieved of his obligations with respect to the sufficiency of the materials and workmanship and the quality of the Goods supplied by the reason of no objection having been taken thereto by the Province's Representative at the time the Goods were delivered.
- 3.4 The Contractor warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The Contractor further warrants that all goods supplied under this contract shall have no defect, arising from design, materials or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the Contractor, that may develop under normal use of the supplied goods in the conditions prevailing in the country of the final destination.
- 3.5 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in the Special Conditions of Contract.

- 3.6 The Province shall promptly notify the Contractor in writing of any claims arising under this warranty. The Contractor shall immediately remedy the said defect free of cost to the Province. Should the Contractor delay remedial work in excess of time stipulated by the Province's representative, the Province may have such remedial work executed at the Contractor's expense. Should the Province decide that the defect is such that it cannot be remedied, the Goods may be rejected. Such rejected goods shall be held at the risk and expense of the Contractor and shall, on request of the Province, be removed by him immediately on receipt of notification of rejection. The Contractor shall be responsible for any loss the Province may sustain by reason of such action as the Province may take, in terms of this clause.
- 3.7 The risk in respect of the Goods purchased by the Province under the contract shall remain with the Contractor until such goods have been delivered to the Province.
- 3.8 The principle feature of the Goods and Work are described in the Goods or Services Information, but the Goods or Services Information does not purport to indicate every detail of construction, fabrication or arrangements of Goods and Works necessary to meet the requirements. Omission from the Goods or Services information of reference to any part or parts shall not relieve the Contractor of his responsibility for carrying out the Work as required under the Contract.
- 3.9 If any dispute arises between the Province and the Contractor in connection with the quality and guarantee of the Goods, either party may give the other notice in writing of the existence of such dispute, and the same shall thereupon be referred to arbitration in South Africa by a person mutually agreed upon by both parties. The submission shall be deemed to be a submission to arbitration within the meaning of the terms of the arbitration laws in force in the Republic of South Africa.

4. FAILURE TO COMPLY WITH CONDITIONS AND DELAYED EXECUTION

- 4.1 If a bidder amends or withdraws his/her/their bid after the closing time but before the bidder is notified that his/her/their bid has been accepted, or when notified that his/her/their bid has been accepted, he/she/they fail/fails, within the period stipulated in the conditions of bid or such extended period as the Province may allow, to sign a contract or to provide security when requested to do so, he/she/they shall, unless the Province decides otherwise, and without prejudice to any other right which the Province may have under paragraphs 4.2 and 4.4, including the right to claim damages if a less favourable bid is accepted or less favourable arrangements are to be made, forfeit any deposit which may have been made with the bid.
- 4.2 Should the contractor fail to comply with any of the conditions of the contract, the Province shall be entitled, without prejudice to any of its other rights, to cancel the contract.
- 4.3 Upon any delay beyond the contract period in the case of a supplies contract, the Province shall, without canceling the contract, be entitled forthwith to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any supplies delivered later at the contractor's expense and risk, or forthwith to cancel the contract and buy such supplies as may be required to complete the contract, and without prejudice to its rights, be entitled to claim damages from the contractor.
- 4.4 Upon any delay beyond the contract period in the case of a service contract, the Province shall, without prejudice to any other right and without canceling the contract, be entitled forthwith to arrange the execution of the service not rendered in conformity with the contract or to cancel the contract, and without prejudice to its other rights, be entitled to claim damages from the contractor.

- 4.5 In the event of the Province availing itself of the remedies provided for in paragraph 4.2-
- 4.5.1 the contractor shall bear any adverse difference in price of the said supplies services and these amounts plus any other damages which may be suffered by the Province, shall be paid by the contractor to the Province immediately on demand, or the Province may deduct such amounts from moneys (if any) otherwise payable to the contractor in respect of supplies or services rendered or to be rendered under the contract or under any other contract or any other amounts due to the contractor; or
- 4.5.2 if the Contractor fails to supply the goods or render the service within the period stipulated in the contract, the Province shall have the right, in its sole discretion, to claim any damages or loss suffered.
- 4.6 No damages shall be claimed in respect of any period of delay which the contractor can prove to be directly due to a state of war, sanctions, strikes, lockouts, damage to machinery as a result of accidents, fire, flood or tempest or act of God, which could not be foreseen or overcome by the contractor, or to any act or omission on the part of persons acting in any capacity on behalf of the Province.
- 4.7 If the delivery of the supplies or the rendering of the service is likely to be delayed or is in fact being delayed on account of any of the reasons mentioned in paragraph 4.6, full particulars of the circumstances shall be reported forthwith in writing to the Province and at the same time the contractor shall indicate the extension of the delivery period which is desired.

5. PATENTS

- 5.1 The Contractor shall pay all royalties and expenses and be liable for all claims in respect of the use of patent rights, trademarks or other protected rights, and hereby indemnifies the Province against any claims arising there from.
- 5.2 The Contractor shall indemnify the Province against all third-party claims of infringement of patent, trademark, or industrial design rights arising from the use of the goods or any part thereof by the Province.

6. PACKAGING, MARKING AND DELIVERY

- 6.1 All goods shall be crated, packed or battened securely in such a manner as to prevent damage during loading, transport and off-loading. Unless otherwise specified, packing cases and packing materials are included in the Contract Price, and shall be and remain the property of the Province.
- 6.2 All goods shall be clearly marked in the manner stated in the Goods or Services Information.
- 6.3 Goods shall be delivered to the address within the Province's area of jurisdiction as set out in the Special Conditions of Contract or Goods and Services Information.
- 6.4 Goods shall be delivered on Weekdays between 08:00 and 16:00, free of all charges, only when ordered upon an official letter or form of order issued by the Province. No goods will be received on Saturdays, Sundays and public holidays. This paragraph (6.4) is applicable only when not excluded in the Special Conditions of Contract.

- 6.5 Goods delivered shall in all cases be accompanied by delivery notes in duplicate, one which will be retained by the Province. The Contractor shall be responsible for the safe delivery as to the quality, quantity and condition of the goods.
- 6.6 Delivery, unless otherwise provided for in the Special Conditions of Contract, shall be affected within seven (7) days from receipt of the order. The Contractor shall advise the Province upon receipt of an order in writing of any anticipated delays, citing reasons therefore and put forward a new anticipated delivery date. The Province may then extend the delivery date, if and as it deems fit.
- 6.7 Should the Contractor fail to supply the material within the time stated in his bid, or within the extended time allowed to him in terms of clause 6.6 hereof, the Province reserves the right (after giving the Contractor seven days' notice in writing) to cancel the contract and purchase the materials elsewhere and the bidder shall refund to the Province any extra cost incurred over and above the contract price. No liability shall, however, be attached to the Contractor if delivery of materials is rendered impossible or delayed by reason of circumstances beyond the Contractor's control.
- 6.8 If the Contractor cannot produce proof satisfactory to the Province that the delay was due to circumstances beyond his control, no price increase after the due date will be recognized.
- 6.9 If at any time the Province ascertains that, due to negligence of the Contractor or for reasons beyond his control:
- 6.9.1 No work on the order has been commenced and in the opinion of the Province, there is little or no prospect of work being commenced in reasonable time;
- 6.9.2 Delivery of any materials is being or is likely to be delayed beyond the delivery date promised, and/or
- 6.9.3 There is little or no prospect of the order being completed within a reasonable time after the promised date; the Province may, by notice to the Contractor in writing, cancel as from the future date specified in such notice, the whole or any part of the order in respect of which material has not been delivered by that date without incurring any liability by reasons of such cancellation. The cases where circumstances beyond the control of the Contractor have delayed commencement or completion of the order, cancellation of the order will be effected by mutual arrangement or where this is not possible by the decision of the Province. The Contractor shall then as soon as possible after such date deliver to the Province that part of the order which has been completed, and payment is to be effected is for the part performance on a proportional basis, subject to the uncompleted part not being an integral or essential part of the contract.
- 6.10 Should a price other than an all-inclusive price be required, this shall be specified in the SCC.

7. CONSIGNMENT OF GOODS

- 7.1 Goods, if delivered by Spoornet may be consigned carriage paid in the Contractor's name, care of the Province to the place of delivery stipulated, but not in the name of the State. Goods consigned to stores located in areas which Spoornet may refuse to deliver, must be done so care of a local agent or to a local depot from which they may be re-delivered by road to such stores.
- 7.2 Contractors shall arrange with Spoornet to deliver goods to the Province's stores during the hours and on the days that the stores are open.

- 7.3 The Province will not be responsible for any damage, re-delivery charges or any other charges raised by Spoornet.
- 7.4 Claims on the South African Transport Services or on any other carrier in respect of weight, quantity, damage or loss, shall be made by the Contractor.

8. PAYMENT

- 8.1 The Contractor shall furnish the Province with an invoice accompanied by a copy of the delivery note upon fulfilment of other obligations stipulated in the contract.
- 8.2 Payments shall be made promptly by the Province, but in no case later than thirty days (30) days after submission of an invoice or claim by the Contractor.
- 8.3 Payments will be made in Rand unless otherwise stipulated.
- 8.4 Payments for goods are made by the Province only. Any disputes regarding late or delayed payments must be taken up with the department and if a problem persists, the Supply Chain Management Office can be requested to investigate the delays.

9. INVOICES

All invoices submitted by the Contractor must be Tax Invoices indicating quantity ordered and quantity delivered, the amount of tax charged and the total invoice amount.

10. CONTRACT PRICE ADJUSTMENT

- 10.1 Firm contract prices shall not be subject to adjustment. Contract prices which are not firm shall be increased or reduced by the amount of variation between the Cost to Bidder and the actual cost to the Contractor, such variations to be subject to the following conditions:-
- 10.1.1 Where the Cost to Bidder was based on a printed catalogue or list price, the variation shall be the difference between that price list and the price list actually charged. Should it transpire that the Cost to Bidder was not based on the latest available price list at the Date of Bid, the Province shall have the right to elect the price list on which any variation shall be based.
- 10.1.2 Where the Cost to Bidder was based on a quotation by the manufacturer, or where the Contractor is the manufacturer, and the Contract Price was based on the cost of materials and labour ruling at a certain date, the variation in the Contract Price shall be calculated by means of the Steel and Engineering Industries Federation of South Africa (SEIFSA) formula if this is stipulated in the Contract, or if the Province's representative considers it to be appropriate. Where the use of the SEIFSA formula is not appropriate, the variation shall be calculated by means of another formula acceptable to the Province, which shall be indicated in the Special Conditions of Contract. Only those cost increases due to wage increases prescribed by regulating measures having the force of law, or increases in the cost of materials and railage as may be proven by documentary evidence, or published data, will be considered in determining Contract Price variation.
- 10.1.3 Any difference between Rates and Charges ruling at the time of bid and those actually paid by the Contractor will be for the account of the Province. The Contract Price adjustment arising from any variation in Rates and Charges shall, in every instance, be applied to the appropriate value, or tonnage, of

the Goods shipped. Where a variation in the Cost to bidder has been allowed, the contract price shall be adjusted by the product of such variation and every component of Rates and Charges which is based on the value of the Goods, whether or not the costs of such components have varied.

- 10.1.4 No claim for increased costs will be entertained if the Contractor is unable to produce documentation to substantiate Cost to Bidder and Rates and Charges on which the contract price was based and documentation to support his claim. Such documentation must, in the opinion of the Province, adequately support the Contractor's claim. No claim for increased costs to the Contractor arising from negligence on his part, or that of the manufacturer, will be considered.
- 10.1.5 The Contractor shall, in respect of every consignment or shipment of Goods delivered, supply to the Province's Representative documentary evidence of variation, if any, in Cost to Bidder and Rates and Charges.
- 10.1.6 Claims for increased cost shall be submitted with the invoice for the Goods in respect of which the claim is made, or as soon thereafter as possible. Claims shall not be considered if received more than 90 days after the expiry of the Contract unless notice of intention to claim has been given to the Province before such date.
- 10.1.7 In the event of there being no claim by the Contractor for increased costs, the Contractor shall not be entitled to full payment under the Contract before he has submitted to the Province, in his own name or in the name of the manufacturer, a certificate declaring that there have been no adjustments in the cost of manufacture which entitle the Employer to a reduction in the Contract Price as provided for in this clause.

11. REMEDIES IN THE CASE OF DEATH, SEQUESTRATION, LIQUIDATION OR JUDICIAL MANAGEMENT

- 11.1 In the event of the death of a contractor or the provisional or final sequestration of his/her/their estate or of his/her/their cession or transfer of a contract without the approval of the Province or of the surrender of his/her/their estate or of his/her/their reaching a compromise with his/her/their creditors or of the provisional or final liquidation of a contractor's company/closed corporation or the placing of its affairs under judicial management, the Province may, without prejudice to any other rights it may have, exercise any of the following options :
 - 11.1.1 Cancel the contract and accept any of the bids which were submitted originally with that of the contractor or any offer subsequently received to complete the contract. In such a case the estate of the contractor shall not be relieved of liability for any claim which has arisen or may arise against the contractor in respect of supplies not delivered or work not carried out by the contractor, under the contract.
 - 11.1.2 Allow the executor, trustee, liquidator or judicial manager, as the case may be, for and on behalf of and at the cost and expense of the estate of the contractor to carry on with and complete the contract.
 - 11.1.3 For and on behalf of and at the cost and expense of the estate of the contractor, itself carry on with and complete the contract and in that event the Province may take over and utilize, without payment, the contractor's tools, plant and materials in whole or in part until the completion of the contract.

- 11.2 Should the Province elect to act in terms of paragraph 11.1.3 it shall give notice of its requirements to the executor, trustee, liquidator or judicial manager of the contractor's estate and should the said executor, trustee, liquidator or judicial manager fail within 14 days of the dispatch of such notice to make provision to the satisfaction of the Province for the fulfillment of such requirements, or should no trustee, liquidator or judicial manager be appointed within 14 days of the occurrence mentioned in paragraph 11.1, the Province may apply any remedy open to it in terms of the contract as if a breach thereof had taken place.
- 11.3 Should the Province act in terms of paragraph 11.1.3 the contractor must leave the premises immediately and may not occupy such premises on account of retention or any other right.

12. LAW TO APPLY

- 12.1 The Contract shall in all respects be construed in accordance with the law of the Republic of South Africa, and any difference that may arise with the law of the Republic of South Africa, and any difference that may arise between the Province and the Contractor in regard to the Contract, shall be settled in the Republic of South Africa.

13. OFFERING OF COMMISSION OR GRATUITY

- 13.1 If the Contractor, or any person employed by him, is found to have either directly or indirectly offered, promised or given to any office bearer of the Province or person in the employ of the Province, any commission, gratuity, gift or other consideration, the Province shall have the right, summarily and without recourse to law and without prejudice to any other legal remedy which it may have in regard to any loss or additional cost or expenses, to cancel the Contract without paying any compensation to the Contractor.

14. PREFERENCES

- 14.1 Should the Contractor apply for preferences in the submission of his bid, and it is found at a later stage that these applications were incorrect or made under false pretences, the Province may, at its own right:-

14.1.1 Recover from the Contractor all costs, losses or damages incurred or sustained

by the Province as a result of the award of the Contract; and / or

14.1.2 Cancel the contract and claim any damages which the Province may suffer by having to make less favourable arrangements after such cancellation.

14.1.3 The Province may impose penalties, however, only if provision therefore is made in the Special Conditions of Bid.

15. WEIGHTS AND MEASURES

- 15.1 The quantities of goods offered or delivered shall be according to South African standard weights and measures.

16. SECURITY

- 16.1 Special Conditions of Contract relating to Surety/Guarantee requirement must be dealt with in strict compliance with the Conditions of Bid set out herein.
- 16.2 In respect of contracts less than R 500 000, the guarantees and sureties required may be based on a risk evaluation conducted by the Province inviting the bid.
- 16.3 No deposits are required for bid applications for contracts below R 500 000.

17. ORDERS

- 17.1 Goods shall be delivered and services rendered only upon receipt of a written official order or the signing of a contract with the Province, and accounts shall be rendered as indicated on the official order or in the contract, as the case may be.
- 17.2 The Province reserves the right to call upon any Contractor during the contract period to make known the following details:
- 17.2.1 Name of Institution placing order;
 - 17.2.2 Provincial official order number;
 - 17.2.3 Quantity ordered; and
 - 17.2.4 List of items ordered.

18. EXPORT LICENCES

- 18.1 When orders are placed for goods in respect of which an export licence from the country of origin of supplies is required, the Contractor shall:
- 18.1.1 Not incur any direct or indirect costs in connection with the supply or dispatch of such supplies before he has obtained such licence;
 - 18.1.2 If the government of the country from which the supplies are to be exported refuses, or fails to grant such licence within three months of the placing of the order, the order shall be considered to be cancelled and no liability will be accepted for any loss or expenses irrespective of the nature thereof, including loss or expenditure suffered or incurred by the Contractor or any other person in respect of the production, supply, transportation or delivery of such supplies.

19. INSURANCE

- 19.1 The goods supplied under the contract shall be fully insured in a freely convertible Currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.
- 19.2 Any insurance policies taken out by a Contractor to cover goods delivered for a contract must be taken out with a company registered in South Africa in terms of relevant insurance and companies acts.

20. INSPECTION, TESTS AND ANALYSES

- 20.1 In terms of Provincial policy, inspections of a Bidder's goods and services are permitted. Bidders and Contractors must allow reasonable access to premises to officials from the department inviting the bid, or person specially appointed by the Province to carry out inspection or tests. There are two main categories: Firstly, where the bid conditions call for goods to be inspected during the contract period. Secondly, where the inspection results are to be submitted with the bid document.
- 20.2 If it is a bid condition that goods to be produced should at any stage during production or on completion be subject to inspection, the premises of the Contractor shall be open, at all reasonable hours, for inspection by a representative of the Province or of an organization acting on its behalf.
- 20.3 Inspections tests and analyses may be carried out prior to dispatch in regard to such contract goods as may be deemed necessary by the Province, and the Contractor shall provide, if required, all the required facilities for the inspection, tests and analyses of the goods free of charge and shall, if required, provide all the materials, samples and labour

and available apparatus which may be required for the purposes of such inspection, tests and analyses free of charge, unless otherwise specified.

- 20.4 If there are no inspection requirements in the bid documents and no mention thereof is made in the letter of acceptance, but during the contract it is decided that inspections shall be carried out, the Province shall itself make the necessary arrangements, including payment arrangements, with the testing authority concerned. The premises of the Bidder Contractor must be open and accessible at all reasonable times for the purposes of these tests.
- 20.5 If the inspection, tests and analyses show the goods or service to be in accordance with contract requirements, the cost of the inspection, tests and analyses shall be defrayed by the Province calling for such tests or analyses. Where the supplies or services do not comply with the contract, the costs shall be defrayed by the Contractor and the Province shall have the right, without prejudice to any other legal remedy it may have, to deduct such costs from payments due to the Contractor under the contract or under any other contract.
- 20.6 Goods and services which do not comply with the contract requirements may be rejected.
- 20.7 Any goods may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract, and such rejected goods shall be held at the cost and risk of the Contractor who shall, when called upon, remove them immediately at his own cost and forthwith substitute them for goods which do comply with the requirements of the contract, failing which such rejected goods shall be returned at the Contractor's cost and risk. Should the Contractor fail to provide the substitute goods forthwith, the Province may, without giving the Contractor a further opportunity to substitute the rejected goods, purchase such supplies as may be necessary at the expense of the Contractor, for example, the transport costs and other expenses regarding the rejected goods must be refunded by the Contractor.
- 20.8 Where imported goods are to be inspected before delivery, the Contractor shall notify his suppliers abroad of the conditions applicable to inspections.
- 20.9 Provisions contained in sub-clause 20.1 and 20.8 shall not prejudice the right of the Province to cancel the contract on account of a breach of the conditions thereof.

21. RESTRICTION OF BIDDING

- 21.1 Without prejudice on any other legal remedies, the Province may impose restrictions on a Bidder in terms of which bids to the Province will not be accepted for such period as determined by the Province. This information may be passed to other provinces or State organisations in the Republic of South Africa. These restrictions may be imposed in terms of the breach of any of the requirements to be met in terms of the accepted bid or contract. The Province may also make a restriction on a bidder from another province or State institution applicable to this Province.

22. CONTRACTOR'S LIABILITY

- 22.1 In the event of the contract being cancelled by the Province in the exercise of its rights in terms of these conditions, the Contractor shall be liable to pay to the Province any losses sustained and/ or additional costs or expenditure incurred as a result of such cancellation, and the Province shall have the right to recover such losses, damages or additional costs by means of set-off from moneys due or which may become due in terms of the contract or any other contract or from guarantee provided for the due fulfilment of the contract and, until such time as the amount of such losses, damages or additional costs have been determined, to retain such moneys or guarantee or any deposit as security for any loss which the Province may suffer or may have suffered.

22.2 The Contractor may be held responsible for any consequential damages and loss sustained which may be caused by any defect, latent or otherwise, in supply or service rendered or if the goods or service as a result of such defect, latent or otherwise, does not conform to any condition or requirement of the contract.

23. PRICE LISTS

Price lists which are part of the contract shall not be amended without the approval of the Province, unless the SCC specify otherwise.

24. SUBMISSION OF CLAIMS

24.1 Claims must be submitted within 90 days of the delivery date of items, but the delivery date will be calculated according to the delivery period stipulated in terms of the contract, unless an extension for late delivery has been granted by the Province.

24.2 For period contracts, no price increase will be granted within the first 180 days of the contract period. No price increase applications which are submitted later than 90 days after the contract period expired will be considered. The claims shall be accompanied by documentary proof and, if required, an auditor's report sustaining the claim shall be provided.

24.3 Claims referring to formulae and indices must be clearly set out in terms of indices or formulae values used to calculate the bid price, and the adjusted indices or values.

25. PROVINCIAL PROPERTY IN POSSESSION OF A CONTRACTOR

25.1 Province's property supplied to a Contractor for the execution of a contract remains the property of the Province and shall at all times be available for inspection by the Province or its representatives. Any such property in the possession of the Contractor on the completion of the contract shall, at the Contractor's expense, be returned to the Province forthwith.

25.2 The Contractor shall be responsible at all times for any loss or damages to the Province's property in his possession and, if required, he shall furnish such security for the payment of any such loss or damages as the Province may require.

26. RIGHTS TO PROCURE OUTSIDE THE CONTRACT

26.1 The Province reserves the right to procure goods outside the contract in cases of urgency or emergency or if the quantities are too small to justify delivery costs, or if the goods are obtainable from another organ of Province or if the Contractor's point of supply is not situated at or near the place where the goods are required or if the Contractor's goods are not readily available.

26.2 No provision in a contract shall be deemed to prohibit the obtaining of goods or services from a Province or local authority.

27. AMENDMENT OF CONTRACT

No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force and effect unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing.

28. NOTICES

- 28.1 Every written acceptance of a bid shall be posted to the supplier/bidder concerned by registered or certified mail and any other notice to him/her/it shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him/her/it in writing and such posting shall be deemed to be proper service of such notice.
- 28.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting such notice.

29. INCIDENTAL SERVICES

- 29.1 The Contractor may be required to provide any or all of the following services, including additional services, if any, specified in the Special Conditions of Bid:
- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the Contractor of any warranty obligations under this contract; and
 - (e) training of the Province's personnel, at the Contractor's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 29.2 Prices charged by the Contractor for incidental services, if not included in the Contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Contractor for similar services.

30. USE OF CONTRACT DOCUMENTS AND INFORMATION INSPECTION

- 30.1 The Contractor shall not, without the Province's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Province in connection therewith, to any person other than a person employed by the Contractor in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 30.2 The Contractor shall not, without the Province's prior written consent, make use of any document or information mentioned in GCC clause 30.1 except for purposes of performing the contract.
- 30.3 Any document, other than the contract itself mentioned in GCC clause 30.1 shall remain the property of the Province and shall be returned (all copies) to the Province on completion of the Contractor's performance under the contract or so required by the Province.
- 30.4 The Contractor shall permit the Province to inspect the Contractor's records relating to the performance of the Contractor and to have them audited by auditors appointed by the Province, if so required by the Province.

31. SPARE PARTS

- 31.1 If specified in SCC, the Contractor may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Contractor:

- (a) such spare parts as the Province may elect to purchase from the Contractor, provided that this election shall not relieve the Contractor of any Warranty obligations under the contract.
- (b) In the event of termination of production of the spare parts:
 - (i) Advance notification to the Province of the pending termination, in sufficient time to permit the Province to procure needed requirements; and
 - (ii) Following such termination, furnishing at no cost to the Province, the blueprints, drawings, and specifications of the spare parts, if requested.

32. PENALTIES

- 32.1 Subject to GCC Clause 4, if the Contractor fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the Province shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of delayed goods or unperformed services, using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The Province may also consider termination of the contract in terms of the GCC.

33. ANTI-DUMPING AND COUNTERVAILING DUTIES AND RIGHTS

- 33.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favorable difference shall on demand be paid forthwith by the Contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the Contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

34. GOVERNING LANGUAGE

- 34.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

35. TAXES AND DUTIES

- 35.1 A foreign Contractor shall be entirely responsible for all taxes, stamp duties, licence fees, and other such levies imposed outside the Province's country.
- 35.2 A local Contractor shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the Province.
- 35.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Province must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.

PART C

A | TERMS OF REFERENCE

APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF CONCRETE BUTTRESS WEIR, AGRICULTURAL SUBSURFACE DRAINAGE, VEHICLE CULVERT CROSSINGS AND REMEDIAL REPAIRS ON EXISTING CONCRETE STORMWATER CANAL. MAKHATHINI IRRIGATION SCHEME BLOCK 6A

1. BACKGROUND

- 1.1. Achieving and maintaining high levels of growth in the agricultural sector is a key national policy objective that holds a high priority in the programmes of the KwaZulu-Natal Department of Agriculture and Rural Development (herein after referred to as Department).
- 1.2. The Department endeavours to contribute to economic growth within the agricultural sector and in the process promote commercialization in the smallholder farm sector, increase opportunities for skilled and relatively unskilled employment, and increase food security.
- 1.3. The Department has therefore prioritized the need to assist resource-poor and emerging farmers with tunnels and irrigation requirements.

2. OBJECTIVES

- 2.1. The Employer requires the installation of subsurface drainage, at Makhathini Block 6 in the Jozini Local Municipality area, KwaZulu-Natal Province.
- 2.2. The Employer desires that the work required be of a high standard and be completed in the shortest practical time whilst making use of local labour where practical possible.
- 2.3. The successful contractor would be required to supply proof and intricate knowledge required to implement agricultural subsurface drainage installation

3. SCOPE OF SERVICES

- 3.1. The Works to be carried out by the Contractor under this Contact comprise mainly the following:
 - 3.1.1. Location and protection of existing services
 - 3.1.2. Site clearance
 - 3.1.3. Excavations
 - 3.1.4. Earthworks
 - 3.1.5. Formwork
 - 3.1.6. Concrete work
 - 3.1.7. Remedial works on existing concrete storm water canal
 - 3.1.8. Installation of Agricultural Subsurface Drainage (Pipe works) 29500m subsurface drains
 - 3.1.9. Installation of Agricultural Subsurface Drainage junction boxes and outlet structures.
 - 3.1.10. Construction of piped vehicle crossings over existing drainage canal x 2
 - 3.1.11. Construction of concrete outlet buttress weir structure
 - 3.1.12. Repair of existing irrigation services within construction area
 - 3.1.13. Re-Establishment of agricultural crops within work area when damaged during construction
 - 3.1.14. Construction of surface water management structures

- 3.2. This description of the Works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.
- 3.3. Estimated quantities of each type of work are given in the Bill of Quantities.
- 3.4. Provision is made for a specialist geotechnical drainage engineer to be on site during the contract period to test the soil conditions as well as absorption rate of the material for each plot. All excavations and backfilling for trenches will be done by the civil contractor and his attention is drawn to the fact that he will not receive any additional payment for re-programming of the works and/or any delays that may be caused by poor coordination between him Mjindi Farming, the individual farmers or other contractor, unless otherwise agreed by the Engineer.
- 3.5. All costs as a result of liaison by the civil contractor with Mjindi Farming or farmers and the accommodation of the main contractor's activities on the site must be allowed for by the contractor in the bill of quantities. The same applies to all the insurances. The main contractor will be fully responsible for the required insurances as prescribed in the Tender Data notwithstanding the fact that the sub-contractor will move onto site and work on the civil contractor's work.
- 3.6. Sufficient information of existing areas and services that have to be crossed must be taken by the Contractor and handed over to the Engineer before such operations commence. No payment will be done in this regard and it shall be deemed covered in the preliminary and general items.
- 3.7. The existing irrigation supply pipelines should remain in operation throughout the duration of the contract.

4. PROJECT LOCATION

- 4.1. The site of the works is located in Makhathini Irrigation Scheme, Block 6, Jozini Local Municipality, KwaZulu-Natal Province.
- 4.2. Co-ordinates:

27° 25' 10.7735"S
32° 10' 01.7359" E

PART D

B I SPECIAL TERMS & CONDITIONS

APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF CONCRETE BUTTRESS WEIR, AGRICULTURAL SUBSURFACE DRAINAGE, VEHICLE CULVERT CROSSINGS AND REMEDIAL REPAIRS ON EXISTING CONCRETE STORMWATER CANAL. MAKHATHINI IRRIGATION SCHEME BLOCK 6A

1. INTRODUCTION

- 1.1. Bidders must ensure that they are fully aware of all the Terms and Conditions contained in this bid document. Only bidders that fully meet the prequalification shall be considered.
- 1.2. The Bidder is required to check the number of consecutively numbered pages and should any found to be missing or in duplicate, or the text of figures indistinct, or should there be any doubt or obscurity as to the meaning of any part of these documents, the Bidder must ascertain the true meaning or intent of the same prior to the submission of his/her Bid, as no claims arising from any incorrect interpretation will be admitted.

2. ACCEPTANCE OF BID

- 2.1. The Departmental Bid Adjudication Committee is under no obligation to accept any bid.

3. AMENDMENT OF CONTRACT

- 3.1. Any amendment to or renunciation of the provisions of the contract shall at all times be done in writing and shall be signed by both parties, subject to the Departmental Bid Adjudication Committee approval.

4. AWARD

- 4.1. Bidders who meet the prequalification shall be scored on functionality and only bidders with a minimum score of 70 shall be evaluated on price and preference points.

5. BASIS OF QUANTITIES

- 5.1. Quantities are as reflected on the Bill of Quantities.

6. BBBEE CERTIFICATE / SWORN AFFIDAVIT

- 6.1 A bidder must submit a valid BBBEE certificate or a sworn affidavit together with the bid for pre-qualification purposes and for claiming BBBEE points.
- 6.2 All BBBEE certificates issued by IRBA, Accountants and Accounting Officers are no longer valid certification and will no longer be considered.

7. CHANGE OF ADDRESS

- 7.1. Bidders must advise the Departmental Supply Chain Management, Contract Administration should their ownership or address (*domicilium citandi et executandi*) details change from the time of bidding to the expiry of the contract.

8. COMPETENCY OF THE SERVICE PROVIDER

- 8.1. This bid is open for contractors with a Construction Industry Development Board (CIDB) database grading of **minimum 7 CE**. The contractor is to submit evidence of his/her own Active registration.
- 8.2. For evaluation processes, the Department shall apply the evaluation criteria as outlined in the Bid Evaluation Criteria of this bid.
- 8.3. It shall be vital for the appointed supplier to have sufficient financial resources and capacity to finance and execute as per terms and conditions of the contract.

9. COMPULSORY SITE BRIEFING

- 9.1 Due to restrictions posed by Covid-19, a compulsory site-briefing meeting will not be held with prospective Bidders. Bidders may liaise with the official responsible for Technical enquiries for any specification related queries.

10. COUNTER OFFERS

- 10.1. Counter offers shall not be considered.

11. DELIVERY CONDITIONS

- 11.1. Delivery of services must be made in accordance with the instructions appearing on the official purchase order.
- 11.2. All deliveries or dispatches must be accompanied by a delivery note stating the official purchase order number against the delivery that has been affected.
- 11.3. In respect of items awarded to them, contractors must adhere strictly to the delivery periods stipulated by them in their bid document.
- 11.4. The instructions appearing on the official purchase order form regarding the supply, dispatch and submission of invoices must be strictly adhered to.
- 11.5. All invoices submitted must be original.
- 11.6. Deliveries not complying with the order form shall be returned to the contractor at the contractor's expense.
- 11.7. No locally manufactured product may be substituted during the contract period with an imported product, and vice versa, without prior approval of the Departmental Bid Adjudication Committee.

12. DETAILS OF PAST OR CURRENT CONSTRUCTION CONTRACTS AWARDED TO THE BIDDER (ANNEXURE C)

- 12.1. The bidder must furnish the following details of all verifiable past and current construction contracts.
 - 12.1.1. Date of commencement of contract/s;
 - 12.1.2. Value per contract; and
 - 12.1.3. Contract details; that is, with whom held, phone number and Address/s of the companies.

13. ENTERING OF DEPARTMENTAL OFFICES

- 13.1. No representative from a company shall be permitted to enter Departmental premises, buildings or containers where stores are kept unless he/ she is accompanied by the responsible official in charge of stores.

14. EQUAL BIDS

- 14.1. If two or more bidders score an equal total number of points, the contract must be awarded to the bidder that scored the highest points for BBBEE.
- 14.2. If functionality is part of the evaluation process and two or more bidders score equal total points and equal preference points for BBBEE, the contract must be awarded to the bidder that scored the highest points for functionality.
- 14.3. If two or more bidders score equal total points in all respects, the award shall be decided by the drawing of lots.

15. INVOICES

- 15.1. All invoices submitted by the Contractor must be Tax Invoices indicating quantity ordered and quantity delivered, the amount of tax charged and the total invoice amount.
- 15.2. A tax invoice shall be in the currency of the Republic of South Africa and shall contain the following particulars:
- 15.2.1. The name, address and registration number of the supplier;
 - 15.2.2. The name and address of the recipient;
 - 15.2.3. An individual serialized number and the date upon which the tax invoice is issued;
 - 15.2.4. A description of the goods or services supplied;
 - 15.2.5. The quantity or volume of the goods or services supplied;
 - 15.2.6. The value of the supply, the amount of tax charged and the consideration for the supply; or
 - 15.2.7. Where the amount of tax charged is calculated by applying the tax fraction to the consideration for the supply and either the amount of the tax charged, or a statement that it includes a charge in respect of the tax and the rate at which the tax was charged.

16. IRREGULARITIES

- 16.1. Companies are encouraged to advise the Department timeously of any possible irregularities which might come to their notice in connection with this or other contracts.

17. JOINT VENTURES

- 17.1. In terms of the Preferential Procurement Regulations, 2017 pertaining to the Preferential Procurement Policy Framework Act 5 of 2000, a trust, consortium or joint venture must submit a consolidated BBBEE Status Level Verification Certificate for every separate bid.
- 17.2. Should this bid be submitted by a joint venture, the joint venture agreement must accompany the bid document before the closing date and time of bid. The joint

venture agreement must clearly specify the percentage of the contract to be undertaken by each company participating therein.

- 17.3. The non-submission of a BBEE Certificate by a trust, consortium or joint venture shall result in zero (0) preference points being allocated for evaluation purposes.
- 17.4. Each party to a Joint Venture/ Consortium must submit an original valid Tax Clearance Certificate together with the bid before the closing date and time of bid.
- 17.5. The joint venture or consortium must submit a formal agreement that outlines the roles and responsibilities of each member of the joint venture or consortium, nomination of an authorised person to represent the joint venture or consortium in all matters relating to this bid and the details of the bank account for payments to be effected.
- 17.6. The joint venture or consortium must comply with Central Suppliers Database (CSD) registration requirements as per National Treasury directive.
- 17.7. The CIDB Calculator must be utilized to calculate the grading for a Joint Venture.

18. LATE BIDS

- 18.1. Bids are late if they are received at the address indicated in the bid documents after the closing date and time.
- 18.2. A late bid shall not be considered and, where practical, shall be returned unopened to the Bidder, accompanied by an explanation.

19. LOCAL PRODUCTION AND CONTENT

- 19.1. The Department of Agriculture and Rural Development promotes Local Production and Content.
- 19.2. In case of designated sectors, only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 19.3. Department of Agriculture and Rural Development reserves the right at its sole discretion to set minimum thresholds for sectors which may not have been declared as designated sectors by the DTI in an effort to stimulate local production and content where relevant.
- 19.4. Bidders are required to assess their product and /or service offering against the designated sector lists as published by the Department of Trade and Industry (the DTI) and to ensure full compliance to the minimum local content threshold, if relevant, before submitting its response to this tender.
- 19.5. The Department of Agriculture and Rural Development latest list of designated sectors can be accessed on http://www.dti.gov.za/industrial_development/ip.jsp
- 19.6. Service Provider should ensure that they complete SDB 6.2 of this document. Failure to complete SDB 6.2 shall result in disqualification.

20. NOTIFICATION OF AWARD OF BID

- 20.1. Notification of award shall be via an advert in the same media as the invitation to tender.

21. PAYMENT FOR SUPPLIES AND SERVICES

- 21.1. A contractor shall be paid by the Department in accordance with supplies delivered and services rendered.
- 21.2. Should a contractor indicate a special discount on his/her account provided payment is made within a certain time, the Department shall make every effort to take advantage of such discount.
- 21.3. Any query concerning the non-payment of accounts must be directed to the Department. The following protocol shall apply if accounts are queried:
- 21.4. Contact must be made with the officer-in-charge of the District Office;
If there is no response from the District Office, the Director: Finance must be contacted;
- 21.5. Information as contained on the Central Suppliers Database must be valid/correct. Non-compliance with Tax Requirements shall affect payment.

22. PERIOD OF CONTRACT

- 22.1. The contract is ad hoc / once off and is to be implemented in 18 months

23. PRE-QUALIFICATION CRITERIA

- 23.1. Only bidders who meet both of the following prequalification criteria may respond:-
 - 23.1.1. **BBBEE level 1 (as per the provisions of section 4(1)(a) of the PPPFA Regulations, 2017); and**
 - 23.1.2. **EME or QSE (as per the provisions of section 4(1)(b) of the PPPFA Regulations, 2017)**
 - 23.1.3. **CIDB 7 CE Minimum**
- 23.2. Bidders must submit documentary proof of compliance with the above prequalification criteria.
- 23.3. Bidders who fail to comply with the above-stipulated prequalification criteria or fail to submit documentary proof of the compliance with the prequalification criteria shall not be considered for this bid.

24. QUALITY CONTROL/ TESTING OF PRODUCTS

- 24.1. The Department reserves the right to inspect and verify the quality and specifications of the supplied materials and equipment, as well as other items listed on the Bill of Quantities, before construction and/or installation. In case of deviations in terms of dimensions, strength, numbers or otherwise, the Contractor shall replace these goods for the correct ones at his/her own expense.
- 24.2. The same replacement obligation to the Contractor would apply during installation and during and after commissioning.
- 24.3. In the case of sustained or repeated non-adherence to the specifications of the materials and/or equipment, as well as in the case of general negligence during the implementation process, the contract may be cancelled. The Department will in such cases seek compensation from the contractor for the estimated costs for completion.

24.4. In cases of deliberate negligence or unwillingness to adhere to the Departmental specifications, the Service provider will be reported to the Provincial and/or National Treasury for listing on the Restricted section of the Central Suppliers database.

25. ORDER OF PRECEDENCE

25.1. This invitation to bid/quote is issued in accordance with the provisions of the Public Finance Management Act (PFMA), Chapter 16 A of the Treasury Regulations and shall be subject to the provisions of the National Treasury Government Procurement General Conditions of Contract (July 2010). The Special Terms and Conditions are supplementary to that of the General Conditions of Contract. Where, however, the special terms and conditions are in conflict with the General Conditions of Contract, the Special Terms and Conditions shall prevail.

26. SUPPLIERS DATABASE REGISTRATION

26.1. A bidder submitting an offer must be registered on the Central Suppliers Database at National Treasury. A bidder who has submitted an offer and is not registered on the Central Suppliers Database shall not be considered at the time of award. No pending registrations shall be considered.

26.2. A Joint Venture/Consortium must be registered on the Central Suppliers Database at the time of submitting the bid.

NB: If a bidder is found to be employed by the State and is on the Central Suppliers database, the bidder shall be disqualified.

27. TAX AND DUTIES

27.1. During quotation stage, prices offered and paid must include all customs, excise and import duties, and any other tariffs or taxes levied by the government or statutory body having jurisdiction on the goods provided under this contract, including Value Added Tax (applicable at the current rate).

28. TAX COMPLIANCE PIN

28.1. The bidder must submit a valid Tax Compliance Pin with the bid. Bidders should note that their tax compliance status shall be verified through the Central Supplier Database and SARS.

28.2. Where a Tax Compliance Pin is not submitted with the bid, the Department shall use the Central Supplier Database to verify the tax matters of the bidder.

29. UNSATISFACTORY PERFORMANCE

29.1. Unsatisfactory performance occurs when performance is not in accordance with the contract conditions.

29.2. The Departmental official shall warn the contractor in writing that action shall be taken in accordance with the contract conditions unless the contractor complies with the contract conditions and delivers satisfactory supplies or services within a specified reasonable time (7 days minimum).

29.3. If the Contractor fails to commence the Works or to proceed with and complete the Works in compliance with the projected timeframes, the Head of Department or his/her representative shall take action in terms of its his/her delegated powers and adopt and exercise one of the following courses wholly or partly, viz: -

- 29.3.1. To direct the Contractor, in writing, on any day named therein to suspend and discontinue the execution of the Works, and to withdraw himself and his workmen from the said Site or Sites,
- 29.3.2. To make a recommendation to the Accounting Officer for cancellation of the contract concerned.
- 29.3.3. To Contract or Contracts by calling for Bids or otherwise with any other Contractor or Contractors for the completion of the Works, or any part thereof, at such times and upon such terms as to the Department shall deem best.
- 29.4. In relation to the foregoing provisions the Department shall charge any sums of money which may be paid by the Department for completing the said Contract against the Contractor and if such amount shall exceed this Contract, then the Department shall have the right to recover such excess or any balance thereof from the Contractor by legal proceedings.
- 29.5. When correspondence is addressed to the contractor, reference shall be made to the contract number/ item number/s and an explanation of the complaint.

30. VALIDITY PERIOD OF BID AND EXTENSION THEREOF

- 30.1. The validity (binding) period for the bid shall be 120 days from close of bid. However, circumstances may arise whereby the Department will request bidders to extend the validity (binding) period. Should this occur, the Department shall request bidders to extend the validity (binding) period under the same terms and conditions as originally offered for by bidders. This request shall be done before the expiry of the original validity (binding) period.

31. VALUE ADDED TAX (VAT)

- 31.1. Bid prices must be inclusive of 15% VAT.
- 31.2. Bidders who make taxable supplies in excess of R1 million in any 12-month consecutive period are liable for compulsory VAT registration, but a person may also choose to register voluntarily provided that the minimum threshold of R50 000 (as of 1 March 2010) has been exceeded in the past 12-month period. Bidders who meet the above requirement must register as VAT vendors, if successful, within one month of award of the bid.
- 31.3. For the purposes of calculating preference points, VAT shall not be considered during quotation process.

32. SERVICE LEVEL AGREEMENT

- 32.1. The successful Bidder and the Department will sign a Service Level Agreement prior to commencement of works. A proposed schedule of works must be provided by the contractor for the approval of the Engineer within two weeks of receiving notification of a successful bid.
- 32.2. The Special Terms and Conditions (STC), the Standard Technical Specifications (STS) and the Project Specific Specifications (PSS) as listed in this bid document, together with the Drawings, are deemed to form part of the SLA.

33. COMMENCEMENT OF THE WORK

- 33.1. Site establishment must start within two (2) weeks, and the actual works within three weeks after hand-over of the site, provided that. Site will be handed over to the contractor once the geotechnical specialist report has been concluded.
- 33.1.1. An official order has been issued;
- 33.1.2. The contractor is in possession of all relevant documentation required for works execution;
- 33.1.3. No exceptional circumstances such as inclement weather or other outside the control of either party to the contract prevail.
- 33.1.4. The geotechnical investigation report has been finalized and recommendations have been incorporated into the design
- 33.2. In case work has not commenced within two (2) weeks of the site hand-over and no attenuating circumstances for the delay can be provided, the Department reserves itself the right to cancel the contract

34. HANDOVER OF SITE TO CONTRACTOR

- 34.1. The Department will organize a site hand-over to the contractor who will then be introduced to the project stakeholders and participants.
- 34.2. The site will be handed back at works completion after a final inspection by the Engineer revealed no outstanding patent defects.
- 34.3. The Contractor will control the site for the contract duration. Only the Contractor's own employees, Contractor's local labour and Departmental Representatives will be allowed on site.
- 34.4. The Contractor is responsible in the administration, control and security on the site at all times during the contract duration.

35. WATER AND POWER

- 35.1. The Contractor shall make the necessary arrangements for the provision of any water and power. No payment will be made for the provision or use of these services and the cost of these shall be included in the Bid/quoted amount.

36. LOCATION OF CAMP

- 36.1. The Contractor's camp may be erected on the site of the works but must meet the approval of the Engineer, project beneficiaries and landowners.
- 36.2. No persons other than a night watchman may sleep in the camp, without the approval of the local relevant Stakeholder.

37. HOUSING OF CONTRACTOR'S EMPLOYEES

- 37.1. The Contractor shall make his own arrangement for housing, payment and feeding his employees and transporting them to and from the site. However, it may be possible to arrange temporary local accommodation for the Contractor's staff with the participants.
- 37.2. The Contractor is in all respects responsible for the housing and transporting of his employees, and for the arrangement thereof, and no extension of time due to any delays resulting from this, will be granted.

38. LABOUR SOURCE & CAPACITY

- 38.1. The Contractor will be required to satisfy the Department that a sufficient and experienced labor force is employed or that sufficient experienced labour can be acquired to complete the services and produce an acceptable quality of workmanship.
- 38.2. The contractor is encouraged to source unskilled labour from the project participants or local community. The Contractor and the Departmental representative (Engineer or local Agricultural adviser) may negotiate with the participants in this regard to establish all the conditions for the utilization of the local labour.
- 38.3. The Contractor will be responsible for all hiring, payment, housing and transport of all labour used for the duration of the contract.

39. SECURITY & RISK

- 39.1. No one shall be allowed on the construction site after normal working hours except for the necessary security personnel.
- 39.2. The Contractor shall also be responsible for safeguarding all plants, machinery, equipment and materials on site. The Engineer shall not be responsible for any lost, damaged or stolen property or materials. Should any of these situations arise, no allocations will be made in terms of finances or time.

40. MATERIALS: DELIVERY, ON & OFF-LOADING, STORAGE & RESPONSIBILITY

- 40.1. The Contractor shall be responsible for the safe delivery, loading, off-loading, handling and storage of any equipment and materials on site.
- 40.2. All equipment, materials and plant stored on site must be suitably protected against damage or loss by theft or otherwise.
- 40.3. The Contractor shall remain fully responsible for all material and plant etc. until the completed works are handed over and have been officially accepted by the Department.

41. EXISTING ROADS, MUNICIPAL PAVEMENTS, ETC.

- 41.1. The Contractor is advised that he will be held responsible for any damage to the existing pavings, roads, municipal pavements, fences, boundary walls, etc., and will have to repair such damage at his expense.

42. DAMAGE TO PROPERTY

- 42.1. If the Contractor or his/her employees, while engaged in the execution of the contract, shall break, deface, injure, destroy or allow to fall into disrepair any part of the Works or property belonging to the Department, or any private property including: buildings, pavings, roads, fences, walls or grounds contiguous to the premises of the Department on which he or they may be employed, the Contractor will be required to repair, in a perfect and workmanlike manner, at own expense all damage to the approval of the Department. The Completion Certificate will not be issued until the Department is satisfied that all necessary remedial work has been satisfactorily completed
- 42.2. The Contractor shall take every precaution against damage or nuisance being caused by dust both to the properties of the Employer and all surrounding properties and shall indemnify the Employer against any claim that might arise there from.

43. UNDERGROUND CABLES AND PIPES

- 43.1. If such services are discovered, immediate notification must be made to the Employer and all work in the vicinity of such cables, pipes, etc., shall cease until safe to proceed.
- 43.2. Should the Contractor damage underground cable or pipes, such damage shall be repaired as soon and safely as possible by the Contractor.
- 43.3. The cost of making good such damage will be met by the Contractor as this must be covered by the Contractors works insurance, unless the damaged cables/pipes were unknown and did not feature on the plans supplied to the contractor.

44. DAILY RAINFALL RECORDS

- 44.1. Submission of rainfall figures is required for the granting of permission of extending the contract period on the basis of inclement weather. If none are kept, the Engineer is under no obligation to grant extension of the completion period for inclement weather.

45. INSPECTION OF WORK

- 45.1. The Departmental representative may at all reasonable times have access to the site where work is being executed for inspection purposes.
- 45.2. The Engineer may request that evidence of the quality or strength of any materials be supplied by the contractor wherever necessary.

46. NOTICE OF COVERING WORK

- 46.1. The Contractor shall give due notice to the engineer whenever any work or materials are intended to be covered in with earth or otherwise in order that their correct dimensions and quality may be ascertained before being covered.
- 46.2. If any such work or materials are covered without such notice having been given, the work or materials shall be uncovered at the Contractor's expense on instructions given by the Engineer.

47. SUB-CONTRACTED WORK

- 47.1. The contractor shall not sub-contract the entire contract.
- 47.2. However, local suppliers and emerging contractors should be considered provided they are capable. Implementing Subsurface Drainage works is complex and requires special expertise and resources to implement the works.
- 47.3. The contractor must sub- contract 30% of the total value of the contract to the following designated group as per PPPFA Regulation 2017.
 - 32.1.1. an EME or QSE which is at least 51% owned by black people;
 - 32.1.2. an EME or QSE which is at least 51% owned by black people who are youth;
 - 32.1.3. an EME or QSE which is at least 51% owned by black people who are women;
 - 32.1.4. an EME or QSE which is at least 51% owned by black people with disabilities;
 - 32.1.5. an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
 - 32.1.6. a cooperative which is at least 51% owned by black people;
 - 32.1.7.

32.1.8. an EME or QSE which is at least 51% owned by black people who are military veterans; or

47.4. More than one of the categories referred to in paragraphs (46.3.1) to (46.3.7). Central Supplier Database (CSD) has the list of all suppliers registered on a database approved by the National Treasury to provide the required goods or services in respect of the applicable designated groups mentioned from which the tenderer must select a supplier(s).

48. INSURANCE

48.1. All accepted approved contractors would be required to provide the following insurance's for the project awarded to them:

- 45.1.1. Insurance against damage, destruction or loss to 50% of the value of the contract.
- 45.1.2. Public Liability insurance.
- 45.1.3. All risks (works) policy and Political.

49. PROTECTION OF THE PUBLIC

49.1. The Contractor shall be responsible for the protection of the public in terms of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993). The Contractor shall pay particular attention to watching and warning lighting and must provide any necessary barriers, etc., required for the protection of the public in terms of the Act.

50. INJURY TO PERSONS

50.1. The Contractor shall be liable for and shall indemnify the department in respect of any liability, loss, claim or proceedings whatsoever, whether arising in Common Law or by Statute in respect of personal injuries to or death of any person whomsoever arising out of or in the course of or caused by the execution of the Works.

51. DISAGREEMENTS

51.1. Notice of disagreement. The Contractor has the right by written notice to the Engineer to require him to consider any disagreement which he raises with the Engineer provided the said written notice shall be given within 14 days after the cause of disagreement has arisen.

51.2. Ruling on disagreements. The Engineer shall give a ruling on the disagreement in writing to the Contractor no later than 14 days after his receipt of a written request from the Contractor requiring him to do so. The Engineer shall provide such a ruling with as little delay as possible. During the response time the Contractor shall not alter the status of the works under contention.

52. FIXED PRICE CONTRACT

52.1. The contract shall not be subject to contract price adjustment.

53. PRICING - COMPLETENESS OF BID

- 53.1. Bidders are required to Bid for all services, products and commissioning as specified in this document and associated plans. This includes those optional items that will be pointed out as required at the bid briefing (e.g. VIP toilet(s), fencing and others). If he/she does not bid on all items, his/her bid will be rejected.
- 53.2. All bid/quoted prices for separate items are to be in South African currency and must exclude VAT.
- 53.3. All items as described in the project specification are to be priced in full.
- 53.4. Transport/Delivery costs must be included in the pricing if the Pricing Schedule does not list them separately.
- 53.5. VAT must be filled in as the sub total followed by the complete price for the entire project.
- 53.6. The Bid price page must be signed by a person legally authorized to do so.

54. QUANTITIES OF WORK

- 54.1. The Contractor shall receive payment only for the works actually executed and approved by the Engineer.

55. PROGRESS PAYMENTS

- 55.1. Payment shall only be made for claims that are commensurate with the works actually executed and complete.
- 55.2. Payment will only be made against the construction progress as pertaining to built /installed items. Movable items and materials on site are generally excluded from progress payments until they have been fully installed or fitted or built up.
- 55.3. If any item or part of an item in an invoice is disputed by the Engineer, the Engineer shall give notice of such with reasons.
- 55.4. The Engineer may elect to use a payment schedule that apportions a weighting for the various work phases, in those cases where the actual pricing schedule is not available or lacks balance.
- 55.5. The contractor shall be paid in up to a minimum of seven part payments. The Contractor is strongly advised to request at least five payments when being notified of him/her being awarded the contract.
- 55.6. Part payments will be made after the Engineer has approved the work and will be made in accordance with the Retention clause (57).
- 55.7. The penultimate payment occurs after practical works completion. The final payment will be made after the 12 months liability period when the contractor has dealt with all defects, if any.

56. COMPLETION OF THE WORKS

56.1. Work completion will be established over three stages, in line with the JBCC.

56.1.1. Practical completion

(a) This is defined as the stage when the works are found to be substantially complete and can be used for the purposes intended. This assessment will be solely made by the Engineer. When the Contractor thinks he has completed the works, an inspection will be made by the Engineer who will draw up a list of patent defects, commonly known as a "snag list", if any. Patent defects are defects that are visible or discoverable upon an ordinary and proper inspection.

56.1.2. Works completion

- (b) This stage will be reached after the Contractor has, to the sole assessment of the Engineer, fixed all defects listed on the snag list. It is at works completion that the Contractor will be paid out 50% of his/her retention money.
- (c) Final completion Final Completion occurs 12 months after Works completion, after expiry of the liability period.

57. RETENTION

57.1. A 10% retention will be withheld on payment for duration of the construction.

57.2. The Department will pay out half of this retention, or 5% of the bid value as part of the second last payment at **practical completion** of the works. The remainder, viz 5%, will be paid out at **final completion after expiry of the defect liability period 12 months** after practical completion), the bidder having eliminated all defects.

57.3. In some instances, the Engineer may decide to shorten this period order to allow all payments to be completed within the financial year. However, this is not a given and the Contractor will be notified during the course of the construction if such would be the case.

58. DEFECT LIABILITY PERIOD

58.1. The defect liability period is 12 calendar months calculated from the date of Practical Completion.

58.2. The contractor shall unconditionally guarantee all materials, workmanship related to the works for that period. The guarantee shall cover any defects due to inferior materials and/or workmanship of the Contractor, or any of his sub-contractors, fair wear and tear excepted. The Contractor shall repair, remedy or replace any such defects, part or complete works without delay and at his own cost.

59. CONTINGENCIES

59.1. An amount of 5% of the subtotal for all materials, equipment and services has been set aside for Contingencies. This allowance will only be accessed for unforeseen additional expenditure not covered in the contract. Such approval must be in line with SCM Delegations.

60. PERIOD OF COMPLETION & RATE OF PROGRESS

60.1. The project has to reach practical completion within 18 months of award of the contract.

- 60.2. If the Works are delayed by any cause beyond the Contractor's control, the Contractor shall have the right within twenty-one days of any such cause of delay arising, to apply in writing to the Department to extend the date of completion, stating the cause of delay and period of extension applied for.
- 60.3. The Department upon receipt of such written application may by order in writing extend such date of completion by a period to be determined, or may refuse to extend such date of completion, or may postpone giving a decision upon such application until completion of the Contract period set out in sub-clause (a) of this clause.
- 60.4. The date of completion will be extended only to the extent approved by the Department.
- 60.5. Should the Contractor fail to apply in writing for an extension within the time set out above, or should the Department refuse to grant any extension in writing, then the Contract period provided shall not be exceeded.
- 60.6. When the Works are completed the Department will give a completion certificate and the date of such certificate shall be the date of commencement of the guarantee period.

61. PENALTY CLAUSE / FINES FOR LATE OR NON-COMPLETION

- 61.1. If the contractor does not complete the work within the time stipulated and no extenuating circumstances can be given for the delay, the Department may impose a fine as detailed below. The total will be subtracted from the retention allowance.
- 61.2. If the contractor fails to complete the works and the Department is forced to employ another contractor to complete the works, the defaulting contractor will be held liable for the costs as far they exceed the original total Bid value.
- 61.3. The department will deduct a penalty for late completion of up to **0.05% of the contract value per working day delay**. This will be deducted from the retention.

PART E

C I SPECIFICATION

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 EMPLOYER'S OBJECTIVES

The Employer requires the installation of subsurface drainage, at Makhathini Block 6 in the Jozini Local Municipality area, KwaZulu-Natal Province.

The Employer desires that the work required be of a high standard and be completed in the shortest practical time whilst making use of local labour where practical possible.

The successful contractor would be required to supply proof and intricate knowledge required to implement agricultural subsurface drainage installation.

C3.1.2 OVERVIEW OF THE WORKS

The contract comprises the civil engineering and related works to agricultural subsurface drainage including outlet structure, canal crossings, maintaining & clearing of vegetation.

C3.1.3 EXTENT OF WORKS

The Works to be carried out by the Contractor under this Contact comprise mainly the following:

- Location and protection of existing services
- Site clearance
- Excavations
- Earthworks
- Formwork
- Concrete work
- Remedial works on existing concrete storm water canal
- Installation of Agricultural Subsurface Drainage (Pipe works) 29500 m subsurface drains
- Installation of Agricultural Subsurface Drainage junction boxes and outlet structures.
- Construction of piped vehicle crossings over existing drainage canal x 2
- Construction of concrete outlet buttress weir structure
- Repair of existing irrigation services within construction area
- Re-Establishment of agricultural crops within work area when damaged during construction
- Construction of surface water management structures

This description of the Works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.

Estimated quantities of each type of work are given in the Bill of Quantities.

Provision is made for a specialist geotechnical drainage engineer to be on site during the contract period to test the soil conditions as well as absorption rate of the material for each plot. All excavations and backfilling for trenches will be done by the civil contractor and his attention is drawn to the fact that he will not receive any additional payment for re-programming of the works and/or any delays that may be caused by poor coordination between him Mjindi Farming, the individual farmers or other contractor, unless otherwise agreed by the Engineer.

All costs as a result of liaison by the civil contractor with Mjindi Farming or farmers and the accommodation of the main contractor's activities on the site must be allowed for by the contractor in the bill of quantities. The same applies to all the insurances. The main contractor will be fully responsible for the required insurances as prescribed in the Tender Data notwithstanding the fact that the sub-contractor will move onto site and work on the civil contractor's work.

Sufficient information of existing areas and services that have to be crossed must be taken by the Contractor and handed over to the Engineer before such operations commence. No payment will be done in this regard and it shall be deemed covered in the preliminary and general items.

The existing irrigation supply pipelines should remain in operation throughout the duration of the contract.

C3.1.4 LOCATION OF THE WORKS

The site of the works is located on small individual farming units within the Makhathini Irrigation Scheme, Block 6, Jozini Local Municipality, KwaZulu-Natal Province.

Co-ordinates:

27° 25' 10.7735"S
32° 10' 01.7359" E

C3.2 ENGINEERING

C3.2.1 DESIGN

- (a) The Employer is responsible for the design of all Permanent Works as reflected in the Contract Documents unless otherwise stated.
- (b) The Contractor shall supply all details necessary to assist the Engineer in the compilation of the as-built drawings.

C3.2.2 EMPLOYER'S DESIGN

The Employer's Design is contained in the Tender Documentation and Drawings. Amendments to the design, if necessary, will be issued during the construction phase.

C3.2.3 CONTRACTOR'S DESIGN

Where the Contractor is to supply the design of designated parts of the permanent Works or temporary Works he shall supply full working drawings supported by a professional engineer's design certificate.

C3.2.4 DRAWINGS

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimension shall not be scaled from the Drawings, unless required by the Engineer. The Engineer will, at the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the drawings.

The Contractor shall ensure that accurate as-built records are kept of all infrastructure installed or relocated during the contract. The position of pipe bends, junction boxes, duct ends and all other underground infrastructure shall be given by either co-ordinates or stake value and offset. Where necessary, levels shall also be given. A marked-up set of drawings shall also be kept and updates by the Contractor. This information shall be supplied to the Engineer's Representative on a regular basis.

All information in possession of the Contractor, required by the Engineer and / or the Engineer's representative to complete the as-built / record drawings, must be submitted to the Engineer's Representative before a Certificate of Completion will be issued.

The Drawings prepared by the Employer for the permanent Works are listed below and are bound in a separate document or is attached at the back of this volume. The Employer reserves the right to issue and / or amend additional drawings during the Contract.

DRAWINGS LIST :-

The following drawings are enclosed in the document.

Drawing Number	Title Description
KZNDARD/MAK/BL6/000	Cover page
KZNDARD/MAK/BL6/001	Locality Map
KZNDARD/MAK/BL6/002	Site Map
KZNDARD/MAK/BL6/003	Subsurface Drainage - System Layout
KZNDARD/MAK/BL6/004	Subsurface Drainage - Typical sections
KZNDARD/MAK/BL6/005	Subsurface Drainage - General Notes
KZNDARD/MAK/BL6/006	Subsurface Drainage - Envelope Material Notes
KZNDARD/MAK/BL6/007	Subsurface Drainage - Manholes Detail
KZNDARD/MAK/BL6/008	Subsurface Drainage - Excavation Detail
KZNDARD/MAK/BL6/009	Subsurface Drainage - Construction Guidelines
KZNDARD/MAK/BL6/010	Existing Storm Water Canal - Drainage Pipe Junction
KZNDARD/MAK/BL6/011	Storm Water Canal – Vehicle Crossing - 1
KZNDARD/MAK/BL6/012	Storm Water Canal – Vehicle Crossing - 2
KZNDARD/MAK/BL6/013	Remedial Works - Existing Concrete Storm Water Canal
KZNDARD/MAK/BL6/014	Outlet Structure - Buttress Weir (part 1)
KZNDARD/MAK/BL6/015	Outlet Structure - Buttress Weir (part 2)
	Contract Name Board Detail, Would Be Supplied Upon Award

C3.2.5 DESIGN PROCEDURES

Not applicable.

C3.3 TECHNICAL EXPERTISE REQUIRED

C.3.3.1 PREFERENTIAL PROCUREMENT

C.3.3.1.1 Requirements

Tenders will be evaluated in terms of the Department of Agriculture & Rural Development Preferential Procurement Policy. Points will be awarded for price, equity ownership by HDI`s and for locality of enterprises.

C.3.3.1.2 Resource standard pertaining to targeted procurement

The Preferential Procurement Policy (PPP) of the Department of Agriculture & Rural Development will be applicable to this project. Relevant sections of the PPP are included in C1.2 Contract Data.

C.3.3.2 SUBCONTRACTING

C.3.3.2.1 Scope of mandatory subcontract works

Not applicable

However, local suppliers and emerging contractors should be considered provided they are capable. Implementing Subsurface Drainage works is complex and requires special expertise and resources to implement the works.

C.3.3.2.2 Preferred subcontractors/suppliers

Not applicable

However, local suppliers and emerging contractors should be considered where practical possible.

C.3.3.2.3 Sub-Contracting procedures

Not applicable

C.3.3.2.4 Attendance on Sub-Contractors

Not applicable

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATIONS

C3.4.1.1 Applicable SANS 1200 Standardized Specifications

- (a) The following SANS 1200 Standardized Specifications for civil engineering construction are applicable

SANS 1200 A:	General (1986)
SANS 1200 AB:	Engineer's office (1986)
SANS 1200 C:	Site clearance (1982)
SANS 1200 D:	Earthworks
SANS 1200 DB:	Earthworks (pipe trenches) (1989)
SANS 1200 DM:	Earthworks (roads, sub-grade) (1981)
SANS 1200 G:	Concrete (structural) (1982)
SANS 1200 L:	Medium-pressure pipelines (1983)
SANS 1200 LB:	Bedding (pipes) (1984)
SANS 1200 LE:	Storm water drainage (1983)
SANS 1200 LD:	Sewers (1982)

- (b) The term "Project specification" must be replaced by "scope of works" wherever it appears in these standardized specifications.

C3.4.1.2 National and International Standards

Not applicable

C3.4.1.3 Particular Specifications

The following Particular Specifications for work not covered by the SANS 1200 Standardized Specification Specifications are also included hereunder:

PB : Building Work

C3.4.1.4 Variations and Additions to the SANS 1200 Standardized Specifications

Variations and additions to the SANS 1200 Standardized Specifications listed in C3.4.1 and the Particular Specification listed in C3.4.1 are given in clause C3.4.6.

C3.4.2 SITE ESTABLISHMENT

C3.4.2.1 Services and facilities provided by the Employer

(a) Water source

Reticulated potable water supply is available in the vicinity of the Site.

The responsible water supply authority in the area of the Site is Mjindi Water within Jozini Local Municipality.

Should the Contractor, in complying with his obligations in terms of sub- clause C3.4.2.2(b): Water, wish to utilize such water supply, he shall himself be responsible for making his own arrangements with the responsible water supply authority for the supply of all water that may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible water supply authority, the Contractor shall further be responsible, at the his own cost, for making or otherwise providing metered connections to the available services at the positions specified by the water authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated water supply will necessarily be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

All charges as may be levied by the responsible water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub-clause C3.4.2.2(b), be deemed to be included in the sums tendered by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates tendered by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of water.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible water authority have been promptly paid in full.

(b) Electricity supply

Reticulated electrical power supply is available in the vicinity of the Site.

The responsible electricity supply authority in the area of the Site is Jozini Local Municipality.

Should the Contractor, in complying with his obligations in terms of sub- clause C3.4.2.2(c): Electricity, wish to avail himself of such supply, he shall, in accordance with the provisions of sub-clause C3.4.2.2 (c), and at his own cost, be responsible for making his own arrangements with the responsible electricity supply authority for the

supply of all electrical power he may require from such reticulation network for construction purposes as well for domestic consumption.

If so required by the responsible electricity supply authority, the Contractor shall, at his own cost, be responsible for making metered connections to the available services at the positions specified by the electricity supply authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated electrical power supply will necessarily be adequate for the Contractor's purpose nor that its supply is in any way guaranteed. All charges as may be levied by the responsible electricity supply authority in respect of electrical power consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub-clause C3.4.2.2©, be deemed to be included in the sums tendered by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates tendered by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of electricity.

The full Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible electricity supply authority have been promptly paid in full.

(c) Excrement/Sewage disposal

Reticulated water-borne sewage disposal system does not exist in the vicinity of the site.

The responsible sewage disposal authority is Jozini Local Municipality.

Should the Contractor, in complying with his obligations in terms of sub-clause C3.4.2.2 (d):

Excrement disposal, wish to avail himself of such facility, he shall, in accordance with the provisions of sub-clause C3.4.2.2 (d), and at his own cost, be responsible for making his arrangements with the responsible disposal authority, and for making such arrangements he may require to the available services.

If so required by the responsible sewage disposal authority, the contractor shall, at his own cost, be responsible for making such arrangements to available services at the positions specified by the sewage disposal authority, as well as for the removal of such services on completion of the contract.

No warranty is offered or given by the Employer to cater for the sewage disposal for the Contractor's purposes nor that of its operation is in any way guaranteed.

All charges as may be levied by the responsible sewage disposal authority in respect of the disposal of sewage generated by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub-clause C3.4.2.2 (d), be deemed to be included in the sums tendered by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts that may have become due and payable by the Contractor to the responsible sewage disposal authority have been promptly paid in full.

(d) Area for contractor' establishment

A specific area in close proximity to or on the Site of the Works will be made available by the Employer to the Contractor for the Contractor's site establishment. The specific area for the Contractor's site establishment will be identified to the Contractor by the Engineer and the Contractor shall have sole use of such area, for the duration of the Contract. The Contractor shall use this area only for the purposes of erecting his site offices, workshops, stores and other facilities required for the execution of the contract.

The Contractor shall not use the area nor allow it to be used for any purposes not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.

Should the Contractor deem the area made available by the Employer to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor's of any area other than that made available to him by the Employer shall be subject to the prior written approval of the Engineer, which approval shall not be subject to the prior written approval of the Engineer, which approval shall not be unreasonably withheld; and provided further that the Contractor shall have no claim against the Employer in respect of any incurred by him, either directly or indirectly in consequence of utilizing any area other than that made available to him by the Employer, and which costs exceed those costs allowed for by the Contractor in his Tender.

(e) Rail facilities

The nearest goods station is Mkuze Station which is located approximately 40 km by road from the Site.

C3.4.2.2 Facilities provided by the Contractor

Facilities for the Engineer

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Engineer and / or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in term of this specification shall constitute grounds for the Engineer to withhold payment of the Contractor's tendered Preliminary and General items until the facility has been provided or restored as the case may be.

(i) Office accommodation

Separate office space is required for the Engineer or his Representative. Refer to PS AB 3.2

The Engineer and his Representative shall be allowed free use of all the Contractor's site facilities.

The Engineer and his Representative shall be allowed free use of survey equipment and assistants to carry out control work as and when required, and the Contractor shall provide all pegs, concrete, tools and other necessary items as well as all necessary labour for excavation, bush clearing, stake subsurface drainage alignments, as and when required for the control of the setting out of the works.

(ii) Carport

The Contractor shall provide on Site for the duration of the Contract, one (1) carport for the sole use of the Engineer and his staff. The carport shall be constructed so that the vehicle parked under it is always protected against the direct rays of the sun.

The carport area shall be at least 20 m² and the floor shall be covered with a layer of crushed stone to alleviate dusty and muddy conditions. The carport(s) shall be positioned so as to provide easy and convenient access to the Engineer's office. Refer to PS AB 3.2.

(iii) Site meeting venue

The Contractor shall provide within his own site establishment facilities, a suitably furnished office or other venues capable of comfortably accommodating a minimum of twelve (12) persons at site meetings. The Engineer shall be allowed free use of such venue for conducting any other meetings concerning the Contractor at all reasonable times.

(iv) Contract Name Boards

The Contractor shall provide, erect and maintain two (2) contract name boards at such positions and locations directed by the Engineer, which name boards shall, unless otherwise specified elsewhere in the Contract, comply with the recommendations for the standard board of the South African Association of Consulting Engineers, with regard to size, painting, Refer to PS AB 5.1.

The Contractor shall keep the contract name boards in good state of repair for the duration of the Contract and shall remove it on completion of the Contract.

(v) Survey equipment assistants

Both are required for the Contract. Refer to PS AB 5.5 and PS AB 5.6

(vi) Computer facilities

Not required

(vii) Fax facilities

Not required

(xiii) Electricity supply for the Engineer

All electricity supply for the Engineer's office(s) and laboratory (if applicable), whether provided by the Contractor by way of reticulated supply from a local authority or other authorized electricity supply, or by way of on-site generators, shall be regulated by the Contractor to within limits such as to prevent damage due to fluctuations in the electrical current supply that may occur to any electrical plant and equipment provided by the Contractor or the Engineer.

The Contractor shall be liable for and pay to the Engineer on demand, all costs that the Engineer may incur in the repair or replacement of any electrical equipment provided by the Engineer on the Site. Reliance by the Contractor on the regulation of the electrical supply by the supplier or on current regulators fitted to generators shall not absolve the Contractor of his liabilities in terms of this Sub-clause and, where appropriate, the Contractor shall provide and install at his own cost, all such electrical current-regulating equipment as is necessary to prevent damage to the said equipment.

(ix) Site instruction book and Site diary

The Contractor shall keep a triplicate book for site instructions on the Site at all times and provide a Site diary completion by the Contractor and the CLO.

C3.4.2.3 Site usage

The Contractor's employees will not be allowed to stay on site except for the duration of a working day. The only person to be allowed on site for the duration of the contract will be the site guards(s).

Access to the site will be in a controlled manner. People visiting the site will have to sign in and out on a daily basis.

C3.4.2.4 Permits and way leaves

The Contractor shall be responsible to engage with the Community Liason Officer and the Social Facilitator to obtain permits and/or way leaves if required to access farm properties required for this Contract. The following items would require specific attention with regard to Provisional Sums catered for various facilitators: - The facilitators should attach the detailed evidence of all the work done with any payment claims presented by the contractor. Copies of all correspondence including any facilitation reports and meetings should be forwarded to KZNDA&RD for information and record keeping.

C3.4.2.5 Features requiring special attention

(a) Site maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

(b) Testing and quality control

(i) Contractor to engage services of an independent laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Engineer in deciding whether comply quality of materials utilized and workmanship achieved by the Contractor to comply with the requirements of the Specifications. The afore-going shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Engineer or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Engineer with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" (as defined in sub-clause PSA 7.2) which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

(ii) Additional testing required by the Engineer

In addition to the provisions of sub-clause C3.4.2.5(b)(i): The Contractor to engage services of an independent laboratory. The Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in sub-clause C3.4.5(b)(i), at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and copies of the test results shall be promptly submitted to the Engineer.

(iii) Costs of testing

(a) Test in terms of sub-clause C3.4.2.5(b)(i)

The costs of all testing carried out by the independent laboratory in accordance with requirements of sub-clause C3.4.2.5 (b)(i), above shall be borne by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms to the Contractor in respect of any testing carried out in terms of sub-clause C3.4.2.5(b)(i).

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

(c) Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of sub-clause C3.4.2.5(b)(ii): Additional testing required by the Engineer, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilized and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

(d) Subcontractors

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Engineer and the contractor in the context of all subcontract work being an integral part of the Works for which the contractor is responsible.

The Engineer will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the contractor and the subcontractors and the Engineer will not become involved.

(e) Opening up and closing down of designated borrow pits

Measurement and payment for opening up and closing down designated borrow pits including removing and stockpiling overburden and restoring the Site, shall be made under item 8.3.4 of SANS 1200 D. This item applies to all borrow material required under this Contract.

The requirements of sub-clause 5.2.2.2 of SANS 1200D regarding the opening up, maintenance and closing down of borrow pits shall be adhered to.

(f) Access to properties

The Contractor shall co-ordinate and organize the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 17.1 of the Conditions of Contract.

If, as a result of restricted road reserve width and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

Notwithstanding the afore-going, the Contractor may, with the prior approval of the Engineer (which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of a road, footpath or entrance temporarily, provided that the Contractor duly notifies the occupiers of the intended closure and its probable duration, and reopens the route as punctually as possible. Where possible, such access roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the Contractor from his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

(g) Employment of local labour

It is the Employer's intention that this Contract should make maximum use of the local labour that is presently unemployed. To this end the Contractor shall limit the utilization on the Contractor of non-local employees to that of key personnel only and to employ and train local labour to the extent necessary for the execution and completion of this Contract.

The Contractor shall fill in the form entitled Key Personnel in the Forms to be completed by the Tenderer. The data stated on the above-mentioned form will be strictly monitored during the Contract period and any deviations thereof shall be subject to the prior approval of the Engineer, which approval shall not be unreasonably withheld.

(h) Monthly payment certificates

The statement to be submitted by the Contractor in terms of Clause 49 of the General Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Engineer, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement.

For the purposes of the Engineer's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustment to his statement as may be required by the Engineer for the purposes of accurately reflecting the actual quantities and amounts which the Engineer deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Engineer within three (3) normal working days from the date on which the Engineer communicated to the Contractor the adjustments required. The Contractor shall submit to the Engineer three (3) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Engineer the requisite copies of the adjusted statement for the purposes of the Engineer's payment certificate will be added to the times allowed to the Engineer in terms of Sub-clause 49.4 of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

(i) Construction in restricted areas

Working space is sometimes restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any facilities encountered by the Contractor while working in restricted areas. No extra payment or any claim for payment due to these difficulties will be considered.

(j) Notices, signs and barricades

All notices, signs and barricades, may be used only if approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to instruct the Contractor to move any sign or notice to another position, or to remove it from the Site of the Works if in his opinion it is unsatisfactory, inconvenient or dangerous.

(k) Workmanship and quality control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Engineer for examination and measurement, the Contractor shall furnish the Engineer with the result of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the Specifications.

C3.4.2.6 Extension of time due to abnormal rainfall

- (a) Extension of time in respect of delays resulting from wet climatic conditions on the Site will only be considered in respect of abnormally wet climatic conditions and shall be determined for each calendar month or part thereof, in accordance with the formula given below:

$$V = (Nw - Nn) + (Rw - Rn) / X$$

in which formula the symbols shall have the following meanings:

V = Potential extension of time in calendar days for the calendar month under consideration: If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn. When the value of V for any month exceeds the number of days in the particular month, V will be the number of days in the month.

Nw = Actual number of days in the calendar month under consideration on which a rainfall of Y mm or more was recorded on the Site

Nn = Average number of days in the calendar month under consideration on which a rainfall of Y mm or more was recorded for the calendar month

Rw = Actual rainfall in mm recorded on the Site in an approved rain gauge for the calendar month under consideration

Rn = Average rainfall in mm for the calendar month, derived from existing records of rainfall in the region on the Site

The factor (Nw-Nn) shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall did not exceed Y mm

The factor **(Rw – Rn) / X** shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall did not exceed Y mm but wet conditions prevented or disrupted work .

- b) The Contractor shall, at his own cost, provide and erect on the Site at a location approved by the Engineer, an approved rain gauge, which shall be fenced off in a manner which will prevent any undue interference by workman and other. The Contractor shall, at his own cost, arrange for the reading of the rain gauge on a daily basis for the duration of the Contract. The gauge readings, as well as the date and time at which the reading ken shall be recorded in a separate record book provided by the Contractor for this purpose.

All entries in the rainfall record books shall be signed by the person taking the and the gauge shall be properly emptied immediately after each reading has been taken. If required by the Engineer, the Engineer shall be entitled to witness the reading of gauge.

- c) The Contractor's claims in terms of Sub-clause 42.2 of the Conditions of Contract for extension of time in respect of delays resulting from wet climatic conditions on the Site during each month, shall be submitted in writing to the Engineer monthly; provided of the gauge.
- (i) the period allowed to the Contractor in terms of Clause 48 of the Conditions of Contract in which to submit his claim for each month shall be reduced to seven (7) days, calculated from the last of the month to which the claim applies; and
- (ii) the 28-day period allowed to the Engineer in terms of Sub-clause 42.2 of the Conditions of Contract in which to give his rulling on the claim, shall be reduced to fourteen 14 days. The Contractor's monthly claim shall be accompanied by a copy of the signed daily rainfall for the applicable month.
- d) The extent of any extension of time which may be granted to the Contractor in respect of wet climatic conditions (whether normal or abnormal) shall be determined as the algebraic sum of the "V" values;
- (i) rainfall occurring within the period of the Contractor's Christmas shut- down period (referred to in Sub-clause 1.6 of the Conditions of Contract) shall not be taken into account in the calculation if the monthly "V" values;
- (ii) rainfall occurring during any period during which the Contractor was delayed due to reasons other than wet climatic conditions on the Site, and for which delay an extension of time is granted by the Engineer, shall not be taken into account in the calculation of the monthly "V" values;
- (iii) if the algebraic sum of the "V" values for each month is negative, the time for completion will not be reduced on account of subnormal rainfall, and

- (iv) where rainfall is recorded only for part of a month, the "V" value shall be calculated for that part of the month using pro rata values for Nn and Rn.
- e) The Engineer shall, simultaneous with granting any extension of time in terms of this clause, revise the Due Completion Date of the Contract to reflect an extension of time having been granted in respect of wet climatic conditions. To the extent of the algebraic sum of all the "V" values for all the preceding months of the Contract, less the aggregate of the "Nn" values for the remaining (unexpired) months for the Contract (viz less aggregate of the potential maximum negative "V" values for the remaining Contract Date shall not revised.
- f) Any extension of time in respect of wet climatic conditions granted in terms of this clause shall not be deemed to take into account delays experienced by the Contactor in repairing or reinstating damage to or physical loss of the Works arising from the occurrence of abnormal climatic conditions. Extension of time in respect of any such repairs or reinstatement regarding damage shall be the subject of a separate application for extension of time in accordance with the provisions of Clause 42 and Clause 48 of the Conditions of Contract.

C3.4.3 PLANT AND MATERIALS

C3.4.3.1 Plant and materials supplied by the employer

Not applicable

C3.4.3.2 Materials, samples and shop drawings

(a) Samples

Materials or work which does not conform to the approved samples submitted in terms of Sub-clause 23.4 of the General Conditions of Contract will be rejected. The Engineer reserves the right to submit samples to tests to ensure that the material represented by the sample meets the specification requirements.

The costs of any such tests conducted by or on behalf of the Engineer, the results of which indicate that the samples provided by the Contractor do not conform to the requirements of the Contract, shall, in accordance with the provisions of Sub-clause 23.7 of the General Conditions of Contract, be for the Contractor's account.

C.3.4.4 CONSTRUCTION EQUIPMENT

C3.4.4.1 Requirements for equipment

Equipment must be such that the work can be executed in an efficient manner

C3.4.4.2 Equipment provided by the employer

No equipment will be provided by the Employer.

C3.4.5 EXISTING SERVICES

C3.4.5.1 Known services

All known services are indicated on the drawings. The onus rests on the Contractor to locate the known services before any construction commences.

C3.4.5.2 Treatment of existing services

Provision is made for repair of existing services that requires to be relocated or removed as indicated on the drawings only at the instruction of the Engineer.

C3.4.5.3 Damage to services

Damage that occurs to unknown services during construction will be paid by the Employer.

C3.4.5.4 Reinstatement of services and structures damaged during construction

The Contractor shall inform the Engineer immediately when a services or structure is damaged. The extent of the damage and a proposal how to reinstate the services or structure shall be submitted to the Engineer on a sketch with dimensions and time frames.

The Contractor shall not be allowed to reinstate any service or structure unless indicated so by the Engineer. The Contractor shall render all reasonable assistance to the croplands, services or structures of the owner with the reinstatement of the crops, service or the structure if required.

C3.4.6 VARIATIONS AND ADDITIONS TO SANS 1200 STANDARDIZED SPECIFICATIONS AND PARTICULAR SPECIFICATION

The following variations and additions to the SANS 1200 Standardized Specifications referred to in sub-clause C3.4.1.1 and the Particular Specifications referred to in sub-clause C3.4.1.3 apply to this Contract. The prefix PS indicates an amendment to SANS 1200 or the Particular Specification. The letters and numbers following these prefixes respectively indicate the relevant Standardized Specification and clause numbers in SANS 1200 to which the variation or addition thereto applies.

C3.5 MANAGEMENT

C3.5.1 MANAGEMENT OF THE WORKS

C3.5.1.1 Applicable SANS and SANS Standards

The provisions of these Specifications take precedence over the provisions of any part of SANS 2001 that is applicable to the contract. The variations and additions to these specifications are described in the section "Applicable SANS 1200 Standardized Specifications".

The SANS 1200 Standardized Specifications listed in C3.4.11 are applicable.

C3.5.1.2 Particular/Generic Specifications

The Particular Specifications listed in C3.4.6 apply to this Contract.

C3.5.1.3 Methods and Procedures

(a) Maintenance of access and infield roads

The operation of construction vehicles on existing roads that have been completed to the level wearing course, shall be limited to the contractor's vehicles only. Hauling is strictly forbidden on wearing course that has been completed as described above. The Contractor shall make use of all temporary haul road; or where not practically possible, program his work in such a manner that the haulage materials shall be restricted to that required for the particular section. No additional payment; shall be made for the use of temporary haul roads and all relevant costs shall be deemed covered by the appropriate rates.

No additional payment will be made for the construction of temporary accessroads to the construction site, borrow areas or the spoil sites, except for payment under payment item A8.3.2.2 of SANS 1200 A.

Should the Contractor make use of existing roads for haulage, he shall be held responsible to clear the road or infield access roads of any spillage caused by his activities within one (1) day after such spillage occurred. No additional payment will be made for the cleaning of the spillage.

(b) Blasting operation

All blasting shall be carried out by a competent, registered blaster. The blaster shall furnish to the Engineer copies of all the permits required to purchase, transport, use and dispose of unused blasting material. The Contractor shall inform the commander of the local SAPS at least 1 day prior to the date and time blasting is about to take place.

No blasting operations shall take place on weekends or holidays or week days after 17h00. The Contractor shall ensure that sufficient suitable material, to the satisfaction of the blaster, is available and in place before the blast is initiated. The Contractor shall be responsible to note in writing (photographs) the structural status of structures (where applicable) before blasting for comparison after blasting.

(c) Normal working hours

Normal working hours shall be from 07h00 until on weekdays from Monday to Friday. It shall be from 07h00 until 13h00 on Saturdays. Work on other days will only be allowed after written approval has been granted by the Engineer.

(d) Interference with Farmers Association or Mjindi Farming staff and operations

The Contractor shall ensure that none of his staff interfere in any way with any Mjindi Irrigation Board staff members or their functions or with the operations of the existing irrigation scheme or sugar cane plantations in any way.

Any person ignoring this shall be removed permanently from site at the expense of the contractor.

(e) Access for farmers

The Contractor shall provide reasonable access to farmers in and around the site from time to time, as and when such access is required. The Contractor is entitled to request reasonable notification before such access by other is required.

The Contractual responsibilities of the Contractor shall remain in full force in spite of the farmers having access to the site.

(f) Giving notice of work to be covered up

The Contractor shall give the Engineer at least 24 hours notice prior to a request for examination of materials or work to be covered up. This request must be made in the request book on site.

Should such a request be made and upon inspection the Engineer found that the works or materials are not yet ready for inspection, the Contractor shall be required to make another appointment.

(g) Sequence of the works

The Contractor shall provide the Engineer with a program negotiated with the individual farmers the sequence of the works to ensure that the existing plant remains in operation.

C3.5.1.4 Quality control (Testing)

Refer to Section C3.4.2.5 (b)

C3.5.1.5 Environmental Management Plan (EMP)

(a) Demarcation of the site

For the purpose of the EMP, the site shall be demarcated into two distinct areas, viz.;

(i) The construction camp comprising all buildings, offices, vehicle wash areas, fuel and material storage area, batching areas and other infrastructure that is required for the running of the job.

(ii) The working area in which construction activities are permitted to take place. No infrastructure, permanent lay down or storage areas shall be established in this working area unless specified in the project specification or prior approval is obtained from the Engineer.

(b) Construction camp

The Contractor shall provide the Engineer with a plan showing the positions of all buildings, yards, batching areas and other infrastructure for approval by the Engineer at least two weeks prior to the commencement date.

(c) Fencing of site

The Contractor shall erect and maintain such a fence (demarcating the boundary of the working area, construction camp and access roads) to the satisfaction of the Engineer.

This fence shall be erected before the commencement of any other work on site. The fence shall be removed after completion of the project and site reinstated to its original state.

(d) Workshops

All workshops shall be located inside the demarcated construction camp area as approved by the Engineer prior to establishment. The workshop shall have a smooth impermeable concrete floor sloped to one side where oil is trapped in an oil trap or sump to contain any spillages of substances such as oil.

Waste material shall be disposed of in accordance with the national, regional and local by-laws regulations and by-laws. The waste be regularly removed and disposed of at an approved site.

(e) Eating areas

The Contractor's employees shall eat in a designated eating area approved by the Engineer. The Contractor shall provide adequate shade and provide scavenger proof and waterproof refuse bins. Cooking will only take place in this area on well maintained gas cookers with fire extinguishers present. Open fires other than the gas cookers shall not be allowed.

(f) Watchmen

The Contractor shall have a watchman present on site all times during non-working hours and on holidays to ensure the safety of plant and materials on site.

(g) Ablution facilities

The exact location of toilets shall be approved by the Engineer. The Contractor shall provide the toilets and maintain and service it on a daily basis. The toilets shall be kept clean. Regular inspections shall be conducted by the Engineer. Burial of waste on site is strictly forbidden. Leaking or broken toilets shall be removed and replaced immediately by the Contractor.

(h) Solid waste

"Solid waste" refers to construction debris, chemical waste, tins, cans, paper, wrappers, excess concrete, waste timber, etc.

The Contractor shall establish a waste control and removal system. He shall submit a method statement to the Engineer for approval prior to commencement. Appropriate solid waste containers shall be provided for the storage of waste. The containers shall be water proof. The waste shall be removed on a regular basis to prevent the accumulation of waste on site and disposed of at an approved waste site.

(i) Wastewater

Water shall be used sparingly on site. Where possible, wastewater shall be recycled. A wastewater management plan shall be submitted to the Engineer for approval two weeks prior to the commencement date.

The management plan shall detail the expected extent of the contamination of each wastewater stream and how the Contractor plans to deal with it.

Wastewater shall be prevented from flowing into the existing canal and streams.

(j) Fuel storage area

Fuel shall be stored on site in a depot at a location as agreed with the Engineer. The Contractor shall ensure that liquid fuels are stored in tanks with lids. The tanks shall be placed on a sloped smooth concrete surface with an oil trap on the lower end to collect any spillage.

Fuel shall be kept under lock at all times

(k) Equipment maintenance and storage

All equipment and vehicles shall be kept in good working order and serviced regularly. Leaking equipment shall be repaired immediately or removed from site. Where possible, maintenance and service shall take place only in the workshop. Permission must be obtained from the Engineer if the aforementioned cannot be adhered to.

The Contractor shall demarcate an area in which the equipment and vehicles may be stored. The location shall be approved by the Engineer.

(l) Materials handling, use and storage

The Contractor is responsible to ensure that all material suppliers are aware of the EMP's restrictions and conditions. The Contractor shall be held responsible should deliveries not comply with EMP requirements.

The Contractor shall comply with all relevant national, regional and local legislation with regard to the transport, use and disposal of hazardous material.

The Contractor shall furnish to the Engineer a list of all hazardous materials to be used on site, together with the handling, storage and disposal procedures of the materials. This information shall be available to all personnel on site.

The location of the hazardous material store shall be within the demarcated construction camp area.

The location shall be approved by the Engineer.

Where possible, the Contractor shall ensure that the refueling of vehicles take places only at the fuel storage area in the construction camp. If this is not possible, the Contractor shall obtain permission from the Engineer to refuel at any other place. Contaminated material and wastewater at the refueling area shall be contained and disposed of correctly.

(m) Emergency procedures

The Contractor shall ensure that emergency procedures for the following situations are submitted for approval to the Engineer.

Fire: The Contractor shall inform the relevant authority immediately as soon as a fire starts. The Contractor shall ensure that his staff and subcontractors are fully aware of the procedures to be followed in the event of a fire.

Spillages: The Contractor shall ensure that his staff and subcontractors are fully aware of the procedures to be followed in the event of a spillage. The Engineer must be informed immediately about a spill. The Contractor shall ensure that the necessary materials and equipment is on site to deal with spills and leaks. The cleanup of spills and leaks shall be for the account of the Contractor.

(n) Care of surrounding areas

The Contractor shall ensure that no contamination or damage to the surrounding areas or watercourse shall occur as a result of any of his activities during construction.

C3.5.1.6 Planning and programming

The existing drainage canal must remain fully operational.

Immediately after handing over the site, the Engineer and the Contractor will discuss the order of procedure and methods in which the Contractor shall carry out the works. The order of the work shall be such that there are no unnecessarily delays of the works.

The programme to be furnished by the Contractor to the Engineer for approval shall be in the form of a Gantt chart. The critical path shall be indicated in red.

C3.5.1.7 Recording of weather

The Contractor shall record the weather conditions on daily basis in the site diary. Rainfall figures which could delay the Works shall be noted and recorded.

C3.5.1.8 Format of communications

All communication regarding the Contract shall be channeled through the Engineer or his representative. Formal contractual communication shall be in writing.

Instructions will only be given by the Engineer or his representative. The Contractor shall not take any instructions from the Employer, the Municipality or the Mjindi Irrigation Board representatives.

C3.5.1.9 Planning and programming

A project progress meeting shall be held monthly on site for the duration of the project on dates to be agreed upon. The Contractor shall be responsible for the venue for the meeting. He will ensure that the CLO attend all such meetings.

C3.5.1.10 Site Diary

Daily records of plant, personnel, materials, etc., shall be recorded daily by the Contractor and noted in the site diary which will be supplied by the Contractor before the commencement date of the project.

C3.5.1.11 Site Instructions

Only the Engineer has the mandate to issue site instructions to the Contractor. This will be done in writing in the site instruction book or per facsimile, or per letter or per minutes of the site meeting.

The Contractor shall furnish an A4 site instruction book in triplicate before the commencement date of the Contract.

C3.6 HEALTH AND SAFETY

C3.6.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES

Before commencement of work, the Contractor shall present to the Engineer his Health and Safety Plan for approval. He shall also appoint a qualified health and Safety Officer in writing and give a copy of the letter of appointment to the Engineer.

The Health and Safety Specification is attached and must be referred to when compiling the Health and Safety Plan.

(a) Construction Regulations, 2003

The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 (the regulations) as promulgated in Government Gazette No 25207 and Regulations Gazette No 7721 of 18 July 2003. Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the Works.

The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the Project Specifications, Schedule of Quantity and Drawings, as well as in the Employer's Health and Safety Specifications (regulation 4(1) of the Construction Regulations 2003.

The Contractor shall in terms of regulation 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the abovementioned plan or regulations.

Payment items are included in the Schedule of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

C3.6.2 MEDICAL FACILITIES AND SAFETY EQUIPMENT

The Contractor shall provide a First Aid cabinet fully equipped and maintained with the minimum contents as listed in the Annexure (Regulation 3) to the General Safety Regulations of the Occupational Health and Safety Act (Act 85 of 1993), to deal with accidents and ailments which are likely to occur during the construction period.

The Contractor shall provide personal safety equipment and facilities as required by Regulation 2 of the General Safety Regulations of the Occupational Health and Safety Act (Act 85 of 1993).

The Contractor shall designate his Safety Officer and Qualified First Aider. The Contractor shall give copies of the minutes of the site safety meetings to the Engineer.

C3.6.3 PROTECTION OF THE PUBLIC

The site is not accessible to the general public. However, the existing canal must remain in operation for the duration of the Contract. The Contractor shall ensure that all personnel entering the construction site is fully informed about the danger on the site. The Contractor shall ensure that non-construction personnel are protected within the guidelines of the OH&S Regulations.

C3.6.4 BARRICADES AND LIGHTING

All excavations and openings in the proposed canal into which or through which a person may fall, shall be securely barricaded in accordance with the requirements of the applicable OH&S Regulations.

C3.6.5 TRAFFIC AND PEOPLE CONTROL

The Safety Officer shall take full responsibility for the traffic and people control in and around the site. The personnel of the existing canal shall be fully informed and trained by the Safety Officer required.

C3.6.6 MEASURES AGAINST DISEASE AND EPIDEMICS

No particular measures have to be taken against disease and epidemics on site.

C3.6.7 AIDS AWARENESS

All construction personnel shall be given an Aids awareness briefing by the Safety Officer.

SANS 1200 A : GENERAL

A3 MATERIALS

PS A 3.1 QUALITY

Substitute the second sentence of the first paragraph of A 3.1 with the following:

Materials shall bear the official mark of the appropriate standard.

Refer to sub-clause C3.4.2.5 (b) on page C3.4-7, retesting and quality control.

A5 CONSTRUCTION

A 5.1 SURVEY

PS A 5.1.1 Setting Out of the Works

Substitute the first sentence in A 5.1.1 with the following:

Setting out of the works is the sole responsibility of the Contractor and shall be done from existing structures as indicated on the drawings. The Contractor shall, within two (2) weeks after the site has been handed over to him, ascertain himself of the correctness of all pegs and benchmarks. Any discrepancy shall immediately be reported in writing to the Engineer. Any costs or subsequent costs arising from discrepancies that had not been reported to the Engineer within the aforementioned period shall be sole responsibility of the Contractor.

Add the following:

The Engineer may alter any part of the Works to suit local conditions. The Contractor must therefore contact the Engineer immediately after the preliminary setting out of any part of the Works before starting with detail setting out, or construction. Only after the Engineer has approved a specific site or part of the Works may the detail setting out and construction commence.

Setting out of the works will not be measured and paid for directly, and compensation for the work involved in setting out shall be deemed to be covered by the tendered rates for the various items of work included under the contract.

The Contractor will not be allowed to continue with any work until the Engineer has been given the opportunity to inspect the setting out of the Works.

PS A 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

Before underground or excavation work is carried out, the contractor shall ascertain the presence and position of all services likely to be damaged or interfered with by his activities. He shall obtain up-to-date plans from the engineer for this purpose, showing the position of services in the area where he intends to work. As services can often not be reliably located from such plans, the contractor shall determine the

exact position of such services by means of suitable detecting equipment and afterwards by careful hand excavation where necessary in order to expose the services at the positions of possible interference by his activities. The contractor shall report any services to the engineer that cannot be found. This procedure shall also be followed in respect of services not shown on the plans but believed to be present.

All such services, the positions of which have been located at the critical points, shall be designated as 'known' services and their positions shall be indicated on a separate set of drawings, a copy of which shall be furnished to the engineer.

While he is occupying the site, the contractor shall be liable for all damage caused by him to known services as well as for consequential damage, whether caused directly by his operations or by the lack of proper protection.

PS A 5.4.3 ALTERATIONS AND REPAIRS TO EXISTING SERVICES

Unless the contrary is clearly specified or ordered, the contractor shall not carry out alterations to existing services. When this is necessary, the contractor shall inform the engineer, who will either arrange for such work to be executed by the owner of the service, or instruct the contractor to make such arrangements himself.

When the contractor damages existing services, he shall immediately inform the engineer, or when this is not possible, the relevant authority, and obtain instructions as to who should carry out repairs. In urgent cases, the contractor shall take the necessary steps to minimize damage to and interruption of the service. No repairs of electric power lines and cables shall be attempted.

The employer will accept no liability for damages due to a delay in having such alterations or repairs effected. The contractor shall provide all reasonable opportunity, access and assistance to persons carrying out alterations or repairs of existing services."

Add the following to A 5.4:

Detected existing services shall also be indicated on the "As Built" drawings.

Where the Contractor is responsible for the cost of repairs carried out by the Employer or others, the costs will be recovered by means of a deduction from the Contractor's monthly payment certificate.

PS A 5.9 SITE MEETINGS

The contractor will be required to attend regular site meetings, normally held once a month to discuss general progress, quality of work, problems, claims, payments, etc, but not matters concerning the day-to-day running of the contract. The engineer shall determine the date, time and venue for such site meetings."

PS A 5.10 COMMUNITY LIAISON OFFICER (CLO)

A Community Liaison Officer shall be appointed for the Contract in consultation with the PSC and Municipality. His/her role will be to liaise between the Contractor, labourers, community and PSC.

The Contractor will pay his remuneration and a provisional sum has been provided for this expenditure. The CLO will assist with the appointment of labour, based on

recommendation by the PSC. The CLO must submit a written report about the status of the project at every site meeting.

A6 TOLERANCES

Add the following subclause:

"PSA 6.4 : General

No guarantee is given that the full specified tolerances will be available independently of each other, and the contractor is cautioned that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerances relating to other aspects of the work.

Except where the contrary is specified or when clearly not applicable, all quantities for measurement and payment shall be determined from the 'authorized' dimensions. These are specified dimensions or those shown on the drawings or, if changed, as finally prescribed by the engineer, without any allowance for the specified tolerances. Except if otherwise specified, all measurements for determining quantities for payment will be based on the 'authorized' dimensions.

If the work is therefore constructed in accordance with the 'authorized' dimensions plus or minus the tolerances allowed, quantities will be based on the 'authorized' dimensions regardless of the actual dimensions to which the work has been constructed.

When the work is not constructed in accordance with the 'authorized' dimensions plus or minus the tolerances allowed, the engineer may nevertheless, at his sole discretion, accept the work for payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the 'authorized' dimensions, and where the actual dimensions are less than the 'authorized' dimensions minus the tolerance allowed, quantities for payment shall be based on the actual dimensions as constructed."

A7 TESTING

PS A 7.4 STATISTICAL ANALYSIS OF CONTROL TESTS

Substitute A7.4 with the following:

Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned.

A8 MEASUREMENT AND PAYMENT

PS A 8.1.2 Preliminary and general items or section

PS A 8.1.2.2 Tendered sums

Replace the contents of this subclause with the following:

"The contractor's tendered sums under items 8.3 and 8.4 in BOQ shall collectively cover all charges for

- risks, costs and obligations in terms of the general conditions of contract and of this standardized specification, except where provision is made in these project specifications to cover compensation for any of these items
- head-office and site overheads and supervision
- profit and financing costs
- expenses of a general nature not specifically related to any item or items of permanent or temporary work
- providing facilities on site for the contractor's personnel, including offices, storage facilities, workshops, ablutions, for providing services such as water, electricity, sewerage, sewage and rubbish disposal, for access roads and all other facilities required, as well as for the maintenance and removal on completion of the works of these facilities and the cleaning-up of the camp site on completion of the works
- providing facilities for the engineer and his staff as specified in SABS 1200 AB and in these project specifications."

PS A 8.1.2.3 Contractor to price all items

Add the following:

"The scheduled time-related items will be adjusted pro rata to any authorised extension to the tendered time for completion of the Contract, in full settlement of any claims for time-related establishment costs."

A 8.2 PAYMENT

PS A 8.2.5 Adjusted Payment for Time-related Items

The payment to the Contractor for time-related items shall be adjusted in accordance with the following formula in the event of the contract being extended by means of a variation order:

Extended contract period as

Sum of Tendered amounts for time X authorized by variation order

Related items Tendered contract period

The above-mentioned adjustment of the payment for time-related items shall be made in the Completion Payment Certificate and shall be the only payment for additional time-related costs.

PS A 8.4.6 Standing Time Costs

- a) Plant Unit : Sum per working day
- b) Labour Unit : Sum per working day
- c) Other (to be specified by Contractor....Unit : Sum per working day

The tendered sum for each item shall include full compensation for all standing time costs of the specified resource of whatever nature and approved by the Engineer, which are not recoverable by way of the provision made in PS A 8.2.5 for the adjusted payment of time-related items.

For the purposes of calculating the total standing time cost, a working week shall be held to consist of five working days and a working day of 9 hours.

Payment for the partial standing of any of the scheduled resources for a day or part thereof, or the standing of a complete resource for a part day, will be made pro rata in proportion to an appropriate factor assessed by the Engineer.

The amount by which the standing time costs is adjusted shall be subject to the contract price adjustment formula as defined in the conditions of contract.

The Contractor shall take note that this payment item shall only apply to delays, which in the opinion of the Engineer are incurred as a result of riot, commotion, politically motivated sabotage and acts of terrorism or disorder outside the Contractor's control. This item shall also apply to standing time incurred as a result of labour boycotts, except that only sub-items (a) and (c), as applicable, will be paid where the Contractor did not pay his labour for the time boycotted. Costs for delays incurred for all other circumstances shall be treated as provided for in the conditions of contract.

The provision of this clause shall in no way prejudice the right of either the Employer of the Contractor to determine the contract in terms of the provisions of Clause 56 of the general conditions of contract.

The Contractor shall take note that no payment will be considered for additional cost or time lost for any daily removal of plant and equipment from the site, any additional costs incurred in protecting his plant and site establishment, or loss incurred in respect of damage to construction plant, equipment and materials supplied and the works.

In the event that GCC 43(1) becomes applicable, the time on which such penalties are calculated shall be reduced by the total standing time approved by the Engineer.

PS A 8.5 Sum stated provisionally by Engineer

- 1) Community Liaison Officer
Unit : Prov. Sum
- 2) Rented accommodation for RE for duration
Unit : Prov. Sum

3) Overheads, charges and profit Unit : %

The Contractor will pay the remuneration of the CLO, the rented accommodation and cellular phone of the RE. A provisional sum has been provided for these expenditures

PS A 8.6 PC SUMS STATED BY THE ENGINEER

REPLACE THE CONTENTS WITH THE FOLLOWING:

“PSA 8.6.1 Prime Cost Sums..... Unit: PC
Sum

SANS 1200 AB : ENGINEER`S OFFICE

AB 3 MATERIALS

PS AB 3.1 NAME BOARDS

Substitute "South African Institution of Civil Engineers" in the first paragraph of AB 3.1 with "KZN Department of Agriculture & Rural Development".

PS AB 3.2 OFFICE BUILDINGS

Add the following to AB 3.2:

The office must have an adjacent carport with minimum dimension of 6,0 m x 3.0 m with a free draining, wearing course floor. The roof must be built in such a way that a vehicle will always be shielded against the sun throughout the day. An approved shade net may used for the sides to comply with above-mentioned requirement.

Substitute sub-paragraph (j) in AB 3.2 with the following:

- j) Provision of an approved 16 000 BTU air-conditioner.
- k) Provision of one copy of the applicable SANS 1200 specifications

AB 4 PLANT

PS AB 4.1 TELEPHONE

No telephone is needed for the Engineer. However will make use of a mobile phone for which provision is made in the Bill of Quantities.

AB 5 CONSTRUCTION

PS AB 5.1 NAME BOARDS

Add the following to AB 5.1:

The name boards shall be erected within a month of the commencement date of the contract and shall be placed at the position indicated by the Engineer. Any damage to these boards shall be repaired within fourteen days of a written instruction issued by the Engineer. No payment shall be made in terms of the contract prior to the erection of the name boards.

The Contractor will be permitted to erect a maximum of two of his own name boards, in positions approved by the Engineer. The Engineer reserves the right to order the removal of these boards if they are not kept in good repair.

PS AB 5.5 SURVEY ASSISTANTS

Substitute "two or more suitably educate survey labourers" in the first sentence of AB 5.5 with two semi-skilled labourers."

PS AB 5.6 SURVEY EQUIPMENT

The Contractor shall provide the following tested and approved survey equipment on site for the duration of the contract and for the use of the Engineer whenever needed:

- a) One automatic level plus tripod;
- b) One tachometer plus tripod;
- c) One tacheometer staff and one level staff, both graduated metrically; and
- d) One 5 m and one 100 m tape measure.

The above-mentioned equipment may by arrangement be shared between the Contractor and the Engineer's representative.

The Contractor shall keep the equipment continuously insured against any loss, damage or breakage, and he shall indemnify the Engineer and the Employer against any claims in this regard. Damaged equipment shall be replaced immediately.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the contract period.

AB MEASUREMENT AND PAYMENT

AB 8.2 PAYMENT

PS AB8.2.2 Survey Assistants and Survey Equipment

No payment shall be made for the survey assistants or survey equipment and shall costs shall be deemed to be covered by the rates tendered for the Contractor's facilities.

SANS 1200 C : SITE CLEARANCE

C3 MATERIAL

PS C 3.1 SCOPE

Substitute the contents of clause 1 with the following:

"This specification covers the removal of vegetation and surface obstructions, and the demolition and removal of structures (including their basements, if any) and the removal of boulders up to the sizes stated in the following Table:

CASE	MAXIMUM BOULDER SIZE
Where the utilisation of Labour-intensive Construction Methods is specified	50 kg
Where the use of Labour-intensive Construction Methods is not required	0,15 m ³

PS C 3.1 DISPOSAL OF MATERIAL

Substitute the first sentence of C 3.1 with the following:

Material obtained from clearing and grubbing shall be disposed off at the site indicated during the site inspection.

C5 CONSTRUCTION

PS C 5.1 AREAS TO BE CLEARED AND GRUBBED

Substitute the first sentence of C 5.1 with the following:

The Engineer will indicate to the Contractor which areas need to be cleared and grubbed. The Contractor may proceed with clearing and grubbing after the Engineer had the opportunity to inspect the setting out of the Works. Measurement and payment for clearing and grubbing shall only occur for areas as instructed in writing by the Engineer.

Add the following:

"Pipeline routes shall be cleared to a distance of 1,0 m on both sides of the pipeline centre line. Route pegs or markers shall not be destroyed or damaged during clearing operations."

C 5.2 CUTTING OF TREES

C 5.2.3 Preservation of Trees

PS C 5.2.3.2 Individual trees

Add the following to C 5.2.3.2:

Only trees indicated by the Engineer will be allowed removed.

A penalty of R 3000-00 per tree for other trees damaged and/or removed will be charge

SANS 1200 D : EARTHWORKS

D3 MATERIALS

PSD 3.1.2 CLASSES OF EXCAVATION

Add the following to D3.1.2

Under this contract soft and intermediate excavation shall be classified together as soft excavation, and hard rock and boulder excavation shall be classified together as hard rock excavation.

Methods, be classified for purposes of measurement and payment in accordance with following TABLE :

MATERIAL CLASSIFICATION	NUMBER OF BLOWS REQUIRED FOR A DCP PENETRATION OF 100 mm	
	GRANULAR SOIL	COHESIVE SOIL
SOFT - Class 1	< 2	< 1
SOFT - Class 2	>2 - <6	>1 - <5
SOFT - Class 3	>6 - <15	>5 - <8
INTERMEDIATE	>15 - <50	>8
HARD	>50	

(NOTE : "Hard" excavation generally includes material such as formations of unweathered rock that can be removed only after blasting.)"

Notwithstanding anything to the contrary as may be stated in or reasonably inferred from anything contained elsewhere in the Contract, the following shall apply with specific reference to the above only:

"Granular soil" shall mean material with a Plasticity Index (PI) equal to or less than six (6); and "Cohesive soil" shall mean material with a Plasticity Index (PI) in excess of six (6).

D 3.3 SELECTION

PS D 3.3.1 General

Substitute the second paragraph of D 3.3.1 with the following:

The Contractor shall deal in such a way with materials from all excavations for structures and pipe trenches to ensure that usable material is not contaminated with unsuitable material. If usable material is contaminated, such contaminated material shall be removed and replaced with material of standard at least equal to the in situ usable material, all at the Contractor's expense. No additional payment shall be made in respect of this and all relevant costs shall be deemed to be included in the tendered rates.

D4 PLANT

PS D 4.5 AVOIDING QUAGMIRE CONDITIONS

In order to prevent quagmire conditions occurring in the excavations, relatively static plant such as back-actors shall be used combined with hand trimming to complete the excavation to final level. Should the Contractor allow quagmire conditions to develop, he shall, at his own expense, take such steps to rectify conditions as the Engineer may order.

D5 PRECAUTIONS

PS D 5.1.2 Existing Services

PS D 5.1.2.2 Detection, location and exposure add the following to D5.1.2.2 The requirements of PSA 5 shall apply mutatis mutandis.

D 5.2.2 Excavation

PS D 5.2.2.1 Excavations for general earthworks and for structures

Add the following to D 5.2.2.1:

Excavations for the clarifiers and the filters shall be extended to 3 m (provisional, to be finalized on site by the Engineer) least of the structures, to remove rock and / or boulders, in order to prevent damage to these structures during future extensions.

Materials under foundations and floors of structures that are regarded by the Engineer as unsuitable for the bearing of such structures shall be removed to the depths and widths ordered. The excavated voids shall then be filled with sand compacted to 100% of mod AASHTO density, to the underside of such foundation or floors, unless a soil cement mixture in terms of PS D 5.2.3.2 is ordered by the Engineer.

PS D 5.2.2.3 Disposal

Substitute the second sentence of D 5.2.2.3 with the following:

All surplus and unsuitable material shall be dumped and neatly finished off, as indicated by the Engineer, in the vicinity of the site.

PS D 5.2.3.2 Backfilling of trenches and backfilling against structures

Add the following to D 5.2.3.2:

Backfilling around structures shall be compacted to 95% (100 % for sand) of mod AASHTO density. When specifically ordered by the Engineer the backfilling against structures shall be done using a mixture of soil cement. The mixture shall contain 5% cement and just sufficient water for it to be placed and compacted like ordinary backfilling material.

PS DA 5.2.6.2 Methods and procedures

Finishing

Final grading. On completion of earthworks to the finished level and of backfilling of all holes, trenches and the like, the whole surface shall be graded, shaped and

compacted to final grades and levels. The surface shall be lightly watered as the Engineer may direct.

Top soiling. Where scheduled, topsoil shall be placed on level and slightly graded areas and shall be lightly compacted by wheeled vehicles or by tamping, and trimmed nearly to the required lines, grades and levels. The final thickness of topsoil after compaction shall be at least 100 mm

D8 MEASUREMENT AND PAYMENT

PS D 8.1

BASIC PRINCIPLES

Add the following to D 8.1:

The rates for excavation shall also cover the cost of dealing with any storm water or subsurface drainage water that may appear in the excavations. It is anticipated that extreme wet conditions would prevail.

D 8.3 SCHEDULED ITEMS

PS D 8.3.2 Bulk Excavation

Add the following sub item to D 8.3.2:

- d) Extra-over 8.3.2(a) for soil cement backfilling where specifically ordered by the Engineer (percentage of cement indicated).. .Unit : m³

The tendered rate for sub item PS D 8.3.2© shall be additional to the rates tendered for D 8.3.2(a) and shall cover the cost of all incidentals required for the complete backfilling with soil cement as specified.

PS D 8.3.3 Restricted Excavation

Substitute D 8.3.3 with the following:

No separate payment shall be made for restricted excavations and all relevant costs shall be deemed to be covered by other tendered rates.

PS D 8.3.8.1 c) Excavate by hand to expose existing service Unit : m³

Add the following to D8.3.8.1 (c):

Excavation by hand to expose existing services shall only be measured and paid for if so ordered in writing by the Engineer. After the excavation of trial holes to determine the exact position and depth of existing services, at intervals as required by the Engineer, the excavation to a level of 300 mm above such services shall be measured and paid for as normal excavation, independent of the depth of such excavation. Only excavation within 300 mm of the existing services will be measured and paid for as excavation by hand and then only if ordered in writing by the Engineer.

SANS 1200 DB : EARTHWORKS (PIPE TRENCHES)

DB 1 SCOPE

Add the following to DB 1.1:

This specification also covers the excavation for agricultural subsurface drainage, irrigation pipes & cable trenches.

PS DB 2.2 APPLICATION

Substitute "pipe and cable trenches in DB 2.2.

D3 MATERIALS

PS DB 3.5 BACKFILL MATERIAL

Add the following to DB 3.5(b):

a) Substitute pipe trenches" in DB 3.5(a) with "from trenches, or excavations for structures".

DB 4 PLANT

PS DB 4.1 EXCAVATION EQUIPMENT

Add the following to DB 4.1:

All excavations exceeding the specified widths shall be backfilled with approved selected material. No payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

DB 5 CONSTRUCTION

PS DB 5.1.2 Storm Water, Seepage and Dewatering of Excavation

Add the following to DB 5.1.2:

The cost of dealing with all types of water shall be deemed to be included in the tendered rates for excavation and no additional payment shall be made in this respect.

PS DB 5.2 MINIMUM BASED WIDTH SPECIFIED

Substitute paragraph (b) of DB 5.2 with the following:

The minimum base width for all pipes with a diameter less than 160 mm shall be 600 mm plus the nominal diameter of the pipes, irrespective of the depth at which they are laid.

The minimum base width for electric cable trenches shall be 500 mm. Where more than one cable is installed in the same trench, the base width shall become 300 mm plus the distance specified between cables. The minimum distance between cables shall be 50 mm.

PS DB 5.5 TRENCH BOTTOM

Substitute "90 % " in the second paragraph of DB 5.5.with "93 % (100 % for sand)"

DB 5.6 BACKFILLING

PS DB 5.6.2 Material for backfilling

In the first paragraph substitute "from trench excavations" with "from excavations for trenches and structures."

PS DB 5.6.3 Disposal of Soft Excavation Material

Add the following to DB 5.6.3:

All surplus and unsuitable material as described in DB 5.6.3 shall be disposed of at the spoil site

DB 8 MEASUREMENT AND PAYMENT

PS DB 8.1 BASIC PRINCIPLES

Delete "along the route of the pipeline" in DB 8.1.1.

DB 8.2 COMPUTATION OF QUANTITIES

PS DB 8.2.4 Shoring

Add the following to DB 8.2.4:

Shoring will only be measured and paid for if the Engineer gives written approval before it is installed.

DB 8.3 SCHEDULED ITEMS

PS DB 8.3.2 Excavation in all materials for trenches, backfill, compact and dispose of surplus material Unit : m

Add the following to DB 8.3.2

The rate shall also cover the cost of dealing with any storm water or subsurface water that may appear in the trenches, as well as for excavation against and protecting existing structures.

SANS 1200 DM : EARTHWORKS (ROADS, SUB-GRADE)

DM 5 CONSTRUCTION

PS DM 5.1.2 Accommodation of Traffic

Add the following to DM 5.1.2

During construction of the works, the Contractor must still provide the farmers and Mjindi with access to their farms, as well as access to irrigation valves.

No separate payment will be made for these accesses as the cost thereof will be deemed to be covered by the tendered rates for the Contractor's facilities.

DM 5.2 METHODS AND PROCEDURES

DM 5.2.2 Cut and Borrow

PS DM 5.2.2.3 b) Cut to spoil

Substitute DM 5.2.2.3(b) with the following:

The provisions for PS D 5.2.2.3 shall apply mutatis mutandis.

PS DM 5.2.2.4 Temporary stockpiling of materials

Add the following to DM 5.2.2.4:

The Contractor shall program the works in such a manner that suitable excavated material shall, if practically possible be placed directly in the appropriate position to ensure that temporary stockpiling is limited to an absolute minimum. No payment shall be made for the temporary stockpiling of material where such material is to be used for backfilling of pipe trenches, except when so ordered in writing by the Engineer.

DM 5.2.3.3 Treatment of Road Bed

PS DM 5.2.3.3 Treatment of road bed

a) Preparation and compaction of damaged road bed

Substitute the first paragraph of DM 5.2.3.3(a) with the following

The road-bed shall be scarified to a depth of 150 mm, watered, shaped and compacted to 90 % of MAASHTO density (100 % for sand), except where otherwise ordered by the Engineer.

PS DM 5.2.8 Transport

Add the following to D 5.2.8

The free haul distance for material from commercial sources shall be unlimited.

DM 8 MEASUREMENT AND PAYMENT

DM 8.3 SCHEDULED ITEMS

PS DM 8.3.4 Cut to fill, Borrow to fill
Unit : m³

Substitute “90% in DB 8.3.4 with (100% for sand)” and “road prism” with “road prism and borrow pits”

PS DM 8.3.12 Overhaul
Unit : m³ or m³.km

Substitute DM 8.3.12 with the following:

The provision of D 8.3.6 shall apply mutatis mutandis.

PSDM 8.3.18 Final finishing and cleaning up of the site of the works Unit : sum

The tendered sum shall include full compensation for clearing, disposal of material, finishing, tidying and for all other work to be performed in finishing and cleaning up the site of the works and affected areas by the removal of all excess earth, stones, boulders, debris and other waste material.

All material resulting from the finishing operations shall be disposed of to a spoil site furnished by the contractor.

SANS 1200 LB: BEDDING (PIPES)

LB 1 SCOPE

PS LB 1.1 SCOPE

Add the following to LB1.1:

This specification also covers the bedding required for subsurface drainage pipes and irrigation pipe repairs.

LB 3 MATERIALS

PS LB 3.1 SELECTED GRANULAR MATERIAL

Substitute LB 3.1 with the following:

Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100% passing a 13.2mm sieve and not more than 5% passing a 0.075mm sieve. See the graphic grading limits to be applied on drawing KZNDARD/MAK/BL6/006.

PS LB 3.2 SELECTED FILL MATERIAL

Substitute LB 3.2 with the following:

The requirements of PS LB 3.1 shall apply mutatis mutandis.

PS LB 3.3 Bedding

Add the following to LB 3.3:

All pipes shall be classified as rigid pipes and shall be laid on Class C bedding.

The bedding material for subsurface drainage pipes shall comply with the requirements of PS LB 3.1 and shall be as detailed on KZNDARD/MAK/BL6/007.

PS LB 3.4.1 Suitable Material Available From Trench Excavations

Substitute LB 3.4.1 with the following:

The provision of PS 3.3.1 shall apply mutatis mutandis.

LB 5 CONSTRUCTION

LB 5.1 GENERAL

PS LB 5.1.4 Compacting

Substitute "90% MOD AASHTO" in LB 5.1.4 with "93 % of MOD AASHTO (85% for sand)"

PS LB 5.5

PLACING AND BEDDING OF SUBSURFACE DRAINAGE PIPES

Bedding and backfilling for drainage pipe shall be executed under this contract. The mechanical contractor shall install the pipe and bedding material. Machine compaction shall not be carried out directly over drainage pipes, unless the pipe is covered by at least 300mm of fill material.

LB 8 MEASUREMENT AND PAYMENT

LB 8.1 PRINCIPLES

PS LB 8.1.5 Disposal of Displaced Material

Add the following to LB 8.1.5:
The provisions of PS D 5.2.2.3 shall apply mutatis mutandis.

LB 8.2 SCHEDULED ITEMS ADD THE FOLLOWING ITEMS:

PS LB 8.2.6 Supply and Place bedding for subsurface drainage pipe, from

- a) Trench excavations.....
Unit:m³
- b) Other excavations.....
Unit:m³
- c) Borrow pits.....
Unit:m³
- d) Commercial sources.....
Unit:m³

Bedding and selected fill for subsurface drainage pipes shall be measured separately.

No differentiation shall be made between trenches, bedding and backfilling for cables to be installed by the Contractor or the mechanical contractor.

The rate shall cover the cost of acquiring, regardless of the distance, bedding and selected fill material that complies with the requirement of PS LB3.3,of delivering it to points alongside the trench spaced to suite the Contractors methods of working, placing in layers and compacting, as specified, and of disposing of displaced material within a free-haul distance of 0.5km.No additional payment will be made for co-operating with the mechanical contractor during the laying of cables and the cost related thereto shall be deemed to be included in the rate for supplying and placing the bedding material.

PS LE 8.2.14 Pipes in subsurface drains :

- (a) Normal duty PE pipes completed with couplings:
 - (i) (Diameter and whether perforated or not, indicated) Unit: m
 - (ii) Etc for other diameters
- (b) Heavy-duty fittings:
 - (i) Type and diameter indicated) Unit:
number
 - (ii) Etc for other types and diameters

SANS 1200 LE : STORMWATER DRAINAGE

PS LE MATERIALS

ADD THE FOLLOWING SUBCLAUSE

PS LE 3.6 MATERIALS FOR SUBSURFACE DRAINS

(a) Pipes and fittings

Pipes for subsurface drains shall be normal duty, perforated or slotted PE pipes complying with SABS 791. Fittings shall be heavy duty and shall also comply with SABS 791.

The size of the perforations in perforated pipes in all cases be 6 mm in diameter \pm 1, 5 mm, and the number of perforations per metre shall not be less than for 100 mm pipes and 52 for 150 mm pipes. Perforations shall be spaced in two rows for 100 mm pipes and in four rows for 150 mm pipes, as shown on the Drawings.

Slotted pipes shall have a slot width of 2 mm with a tolerance of 0, 5 mm in width. The arrangement of the slots is subject to the Engineer's approval, but the total slot area shall not be smaller than that specified for perforations.

(b) Crushed stone / Envelope Material

Crushed stone shall be 13 mm and 19 mm single-sized and shall comply with the requirements of SABS 1083. Other suitable filtermaterial withing acceptable drainage curves will be allowed if accepted by the Engineer.

PS LE 5 CONSTRUCTION

ADD THE FOLLOWING SUBCLAUSE:

PS LE 5.8 CONSTRUCTION OF SUBSURFACE DRAINS

After the completion of the excavations, the bottom portion of the trench shall be lined a layer of crushed stone and / or envelope / filter material of the thickness as shown on the Drawings finished to the required gradient.

Pipes of the required size shall be firmly bedded on the permeable material, true to level and grade, and coupled where required. The trench shall then be backfilled with crushed stone / filter material to the height above the pipes shown on the Drawings or as directed by the Engineer.

Crushed stone shall be placed in layers of not more than 300 mm at a time and shall be lightly compacted. Care shall be taken to prevent the contamination of envelope material during construction of the subsurface drains and all material contaminated by soil or silt shall be removed and replaced by the Contractor at his own expense.

Perforated and or slotted pipes shall be joined by couplers. Perforated pipes shall be laid with the perforations at the top or at the bottom, as directed by the Engineer. The

higher end of subsurface drain pipes shall stop a manhole as shown on the Drawing :-
KZNDARD/MAK/BL6/007

Care should be taken to ensure sediment traps within manholes to ensure positive outlet capacity. Elbow couplings at discharge and inlet pipes as per Drawing.

The remainder of the trench shall be immediately backfilled with approved permeable material preferably obtained from the excavations, in layers not exceeding 150 mm and compacted to 80% of modified AASHTO density, unless otherwise ordered by the Engineer. The trench shall be specially protected against the ingress of excess water, soil and silt until the backfilling with permeable material has been completed.

Permeable material in subsurface drains shall not be taken to the surface but shall be discontinued at such heights as will be determined by the Engineer.

Any section of a subsurface drain constructed with pipes without perforations or slots shall be backfilled with impermeable backfill material as described above. Suitable excavated material may be used for backfilling. Payment for excavations as well as for backfilling with impermeable material will be made under SABS 1200 DB.”

SPECIFICATION PB - GENERAL BUILDING WORK

1.0 SCOPE

This section specifies the general requirements for the construction of buildings.

2.0 INTERPRETATIONS

2.1 SUPPORTING SPECIFICATIONS

- a) SANS 0400 - National Building Regulations;
- b) SANS 1200 A or SANS 1200 AA as applicable;
- c) SANS 1200 C;
- d) SANS 1200 D or SANS DA as applicable;
- e) SANS 1200 G or SANS 1200 GA or SANS 1200 GB as applicable.

2.2 GENERAL

Building work shall be carried out in accordance with the National Building regulations and Building standards Act, 1977; and these specifications.

References to specifications and codes of practice of the South African Bureau Standards shall be taken to be references to the latest edition of such specifications and codes of practice amended, where possible the SANS mark shall appear on all articles, materials or items where it is required to comply with such SANS specification.

3.0 MATERIALS

3.1 CEMENT

Cement for masonry work shall comply with the requirements of SANS 50412-1 and cement for concrete work shall comply with the requirements of SANS 1200G and its project specifications. Separate storage facilities shall be provided for various types of cement.

3.2 WATER

Water shall be clean free clay, silt, oil, acid, alkali, organic or other matter which would impair the required strength and durability of mortar, plaster or floor screed.

3.3 LIME

Lime shall be hydrated bedding mortar lime complying with requirements of SANS 523.

3.4 AGGREGATE

Sand for plaster and mortar shall comply with the requirements of SANS 1090, whereas the aggregates for normal and granolithic floor creeds shall comply with the requirements of BS1199 and BS1201 respectively.

4.0 PLANT

4.1 GENERAL

The Contractor shall have at his disposal the normal plant necessary for the proper and neat completion and rounding off of all faces of the works.

5.0 TOLERANCES

5.1 BASIS OF MEASUREMENT

5.1.1 General

Permissible deviation will apply in the case of linear dimensions, position, and level. The Contractor shall construct each of the various parts of the works within the limits of the applicable permissible deviations set out in clause 6.2 unless some other degree of accuracy is required in terms of the project specification or is shown on the drawings.

5.1.2 Methods of Measurement of Deviations

Certain deviations will be measured as set out below:

- a) Any pipe invert levels 0,1 m
- b) Any pipe slope 0,05%
- c) Any deviation from flatness of a plane surface will be measured as the maximum deviation of the surface from any straight line of length 3 m joining two points on the surface, determined by means of a straight edge the ends of which are supported on identical blocks of suitable thickness placed one over each of the points.
- d) Any abrupt change in a continuous surface, including a local depression or peak in a floor or wall, will be measured as specified in (a) above.
- e) Out-of-squareness of a corner or an opening or an element such as a column will be measured by taking the longer of two adjacent sides as the base line, and determining any departure from the perpendicular of the side at either end of this base line.

5.2 PERMISSIBLE DEVIATION

The permissible deviation for elements or components shall be as follows:

- a) Position of plan of any edge or surface measured from the nearest grid liner agreed centre line.....
± 25 mm
- b) Linear (other than cross-section) dimension..... ± 30 mm
- c) Cross-section dimensions..... 10
+ 20 mm
- d) Level (deviation from designed level with reference to the nearest transferred datum (TD) of the upper or lower surface, as may be specified, of any slab other element or component).....
±10 mm

6.0 TESTS

6.1 GENERAL

The Engineer shall have free access to the works for taking samples and carrying out tests. The Contractor shall render any assistance necessary. if so required, the Contractor shall provide storage and protection of such samples on site.

7.0 MEASUREMENT AND PAYMENT

7.1 GENERAL

7.1.1 All items in this section will be measured by number, square metre or linear meter completed and the tendered rates shall include full compensation for the supply, delivery, handling and installation of all materials, the provision of all necessary labour

and supervision, transport, plant, equipment and incidentals necessary to complete, protect and maintain the works as specified or as shown on the drawings.

7.1.2 Where a lump sum is required for a complete structure the tendered rate shall include all items and contingencies, as specified in this section or as shown on the drawings.

PORTION 3: SPECIFICATION IN TERMS OF THE CONSTRUCTION REGULATIONS 4 (1) (a) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, NO 85 OF 1993

1. BACKGROUND

In terms of the Construction Regulation 4 (1) (a) of the Occupational Health and Safety Act, No. 85 of 1993, the Client is required to compile a Health & Safety Specification for the intended project and provide such specification to any prospective tenderer. The Client's further duties are as 4(1) to 4(6) in The Construction Regulations, July 2003.

2. SCOPE

Development of a Health & Safety Specification that addresses all aspects of occupational health and safety as affected by the Construction of civil engineering / agricultural services for the installation of agricultural subsurface drainage scheme in Block 6 Makathini.

3. OH&S MANAGEMENT

3.1 Structure and Organization of OH&S Responsibilities

3.1.1. Overall Supervision and Responsibility for OH&S

- The Client is to ensure that the Principal Contractor, appointed in terms of Construction Regulation 4(1)(c), implements and maintains the agreed and approved OH&S Plan. The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act is to ensure that the Employer (as defined in the Act) complies with the Act. Annexure 2 - "Legal Compliance Audit" may be used for this purpose. Any OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her respective appointment forms.
- The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 6.

3.1.2. Further (Specific) Supervision Responsibilities for OH&S

- Appointments required by the Act and Regulations:
- OH&S Representatives (Sections 17/18 of the Act)
- OH&S Committees (Sections 19/20 of the Act)
- Risk Assessor (Construction Regulation. 7(1))
- Accident/Incident Investigations Co-ordinator (General Administrative Regulation 9 (2))
- Form/Support work Supervisor (Construction Regulation 10(a))
- Batch Plant Supervisor (Construction Regulation 18(1))
- Stacking & Storage Supervisor (Construction Regulation 26(a))
- Fire Equipment Inspector (Construction Regulation 27((J))

- Electrical Installations, Machinery & Appliances Inspector (Construction Regulation 22)
- Excavation Supervisor (Construction Regulation 11(1))
- Demolition Supervisor (Construction Regulation 12(1))
- OH&S Officer (where necessary) (Construction Regulation 6(6))
- Person Responsible for Machinery (General Machinery Regulation 2)
- Emergency, Security and Fire Co-ordinator (Construction Regulation 27(h) & Environmental Regulation 9)
- Fire Equipment Inspector (Construction Regulation 27(h) Environmental Regulation 9)
- First Aider (General Safety Regulation 3(2))
- Hazardous Chemical Substances Supervisor (HCS Regulations)
- Ladders Inspector (General Safety Regulation 13A)
- Lifting Equipment Inspector (Construction Regulation 20)
- Operators & Drivers of Construction Plant & Vehicles (Construction Regulation 21 (i))
- Structures Supervisor (construction Regulation 9)
- Users Operators of Construction Equipment (Construction Regulation 21 (i))
- Welding Supervisor (General Safety Regulation 9)

3.2. Communication and Liaison

OH&S liaison between the Client, the Principal Contractor, the other Contractors, the Consulting Engineer and other concerned parties will be through the OH&S Committee.

- 3.2.1. In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises. Consultation with the workforce on OH&S matters will be through their Supervisors, OH&S Representatives, the OH&S Committee and their elected Trade Union Representatives, if any. The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and the Consulting Engineer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous / dangerous conditions / situations etc

BLOCK 6A - JOZINI - UMKHANYAKUDE DISTRICT

SCHEDULE 1

1200A

1200 GENERAL REQUIREMENTS AND PROVISIONS

Item No.	Payment	Description	Unit	Quantity	Rate	Amount
	SANS 1200					
A	PS.A 8.5	SUMS STATED PROVISIONALLY BY ENGINEER				
A.1.1	8.5 b1	1) Provision for Community Liaison Officer (CLO)	Provisional / Month	18		
A.1.2	PSA12.5	2) Specialist professional services geotechnical agricultural & subsurface drainage engineer & ECSA mentorship. Approval by KZNDARD required of consultant to be appointed.	Provisional / Month	18		
A.1.3	8.5 b1	3) Entrepreneurial skills Training and Venue	Provisional / Month	18		
A.1.4	PSA12.5	4) Geotechnical and Filtration tests requirements	Provisional / Month	18		
A.1.5	PSA12.5	5) Surveys (Stakeouts, Quality Control & Verification)	Provisional / Month	18		
A.1.6	PSA12.5	6) Re-establishment of damaged agricultural crops or crop losses within farms.	Provisional / Hectare	59		
		7) Typical remedial works scope required to existing concrete drainage canal				
		1. Add missing concrete panels within existing canal.				
		2. General- grout around sub-soil drain inlets into canal3. Add incomplete drainage pipe junctions to the canal.				
A.1.8	8.5 a)	4. Remove soil & debris deposits in the existing canal.	Provisional sum	1000		
		5. Installation of emergency access ladders within existing canal				
		6. Repair / replace cracked & damaged canal panels.				
		7. Backfill behind concrete panels of canal.				
A.1.9	8.5 b1	8) Construction contingencies 5% of esitmated contract value	Provisional sum	1		
A. 1.10	8.5 b2	Contractors handling costs, overheads, charges and profit and all other charges in respect of sub items	%			
TOTAL CARRIED FORWARD TO SUMMARY						

SCHEDULE 2

1200B

Item No.	Payment	Description	Unit	Quantity	Rate	Amount
	SANS 1200 A	PRELIMINARY & GENERAL				
B	8,3	FIXED-CHARGE ITEMS				
B.1.1	8.3.1	Contractual requirements (eg. Insurances, UIF etc)	Months	18		
B.1.2	8.3.2	Establish facilities on site (eg. Fencing, Electricity, Water, Plant ...)	Sum	1		
	8.3.2.1	Facilities for Engineer (SANS 1200 AB)				
B.1.3	8.3.2.1 (c)	Supply and install Two Name boards	Sum	1		
B.1.4	8.3.2.2	Facilities for contractor				
B.1.5	8.3.2.2 (a)	Office and storage sheds	Sum	1		
B.1.6	8.3.2.2 (b)	Workshops	Sum	1		
B.1.7	8.3.2.2 (c)	Laboratories	Sum	1		
B.1.8	8.3.2.2 (d)	Living Accommodation - Site Security	Sum	1		
B.1.9	8.3.2.2 (e)	Ablution and latrine facilities	Sum	1		
B.1.10	8.3.2.2 (f)	Tools and equipment	Sum	1		
B.1.11	8.3.2.2 (g)	Water supplies, electricity and communications	Sum	1		
B.1.12	8.3.3	Other fixed-charge obligations	Sum	1		
B.1.13	8.3.4	Remove Engineer`s and contractor`s site establishment on completion of contract	Sum	1		
B.1.14	8.3.5	Provision for OSH&S requirements such as but not limited to : HIV awareness and safety training	Sum	1		
B.1.15	8.3.6	Provision for Environmental management plan requirements	Sum	1		
	TOTAL CARRIED FORWARD					
	TOTAL BROUGHT FORWARD					

	Payment	Description	Unit	Quantity	Rate	Amount
B.2	8,4	TIME-RELATED ITEMS				
B.2.1	8.4.1	Contractual requirements	Month	18		
	8.4.2.2	Facilities for contractor				
B.2.2	8.4.2.2 (a)	Office and storage sheds	Month	18		
B.2.3	8.4.2.2 (b)	Workshops	Month	18		
B.2.4	8.4.2.2 (c)	Laboratories	Month	18		
B.2.5	8.4.2.2 (d)	Living Accommodation	Month	18		
B.2.6	8.4.2.2 (e)	Ablution and latrine facilities	Month	18		
B.2.7	8.4.2.2 (f)	Tools and equipment	Month	18		
B.2.8	8.4.2.2 (g)	Water supplies, electricity and communications	Month	18		
B.2.9	8.4.2.2 (h)	Dealing with water	Month	18		
B.2.10	8.4.2.2 (i)	Access for contractor and affected parties	Month	18		
B.2.11	8.4.3	Supervision for duration of construction or contract	Month	18		
B.2.12	8.4.4	Provision for OSH&S requirements such as but not limited to : HIV awareness and safety training	Month	18		
B.2.13	8.4.5	Provision for Environmental management plan requirements	Month	18		
TOTAL CARRIED FORWARD						

TOTAL BROUGHT FORWARD							
	Payment	Description	Unit	Quantity	Rate	Amount	
B.3	PS A 8.6	DAYWORKS					
B.3.1		Unskilled Labour	Day	20			
B.3.2		Semi-skilled Labour	Day	20			
B.3.3		Skilled Labour	Day	20			
B.3.4		Foreman	Day	20			
B.3.5		6 ton Tipper truck with operator	Hour	200			
B.3.6		10 ton Tipper truck with operator	Hour	200			
B.3.7		0.5 cubic metre excavator with operator	Hour	200			
B.3.8		5 000 litres water tanker with operator	Hour	200			
TOTAL CARRIED FORWARD TO SUMMARY							

SCHEDULE 3

1200C

SANS

SITE CLEARING CIVIL WORKS

BLOCK 6A - MAKATHINI

1200C

Item No.	Payment	Description	Unit	Quantity	Rate	Amount
	8.2.1	SITE CLEARANCE				
C.1.1	8.2.1 (a)	Clear and grub area within existing canal reserve	ha	12,75		
C.1.2	8.2.1 (b)	Clear and grub subsoil drainage route (10,0m wide)	m	29 500		
C.1.3	8.2.2	Remove and grub large trees and tree stumps regardless of girth	No.	10		
C.1.4	8.2.3	Trees over 1.0 m and up to and including 2,0 m	No	30		
C.1.5	8.2.9	Transport debris and shrubs of materials cleared on the site to a dumping site identified by the Engineer (incl. hauling up to 5km)	m ³ .km	60		
	TOTAL CARRIED FORWARD					

SCHEDULE 4

1200D

1200 D SITE CLEARANCE

BLOCK 6A - MAKATHINI

Item No.	Payment	Description	Unit	Quantity	Rate	Amount
D.1	SANS 1200 D	EARTHWORKS				
		EXCAVATION				
	8.3.2	Restricted excavation:	No.			
D.1.1	8.3.2 (a)	1) Excavate for restricted manhole foundations or structures in all materials, and use for backfill or dispose	m ²			
D.1.2	8.3.5 (b)	Extra excavation in all materials to provide working space around structure	m ³	360		
D.1.3	8.3.7 (a)	1) Intermediate excavation	m ³	3 240		
D.1.4	8.3.7 (b)	2) Hard rock excavation	m ³	33402		
D.1.5	8.3.7 (c)	3) Hand excavation and backfill where ordered by the Engineer	m ³	150		
D.1.6	8.3.7 (d)	Soilcrete backfill where directed by the Engineer		50		
D.1.7	8.3.6 (b)	Overhaul (provisional)	m ³	100		
D.1.8	8.3.6 (b)	Limited overhaul				
D.1.9	8.3.6 (c)	Long overhaul		2 500		
D.1.10	8.3.10	Top soiling	m ³ /km	6 250		
D.1.11		Extra over for temporary stock piling	m ³	13000		
D.1.12		Extra over items for disposing of spoil material on a site provided by the contractor	m ³	2 500		
			m ³	7 500		
TOTAL CARRIED FORWARD TO SUMMARY						

SCHEDULE 5

1200DB

1200 DB

SUBSOIL DRAINAGE PIPELINES

BLOCK 6A - MAKATHINI

	Payment	Short Description	Unit	Qty	Rate	Amount
E.1	SANS 1200DB	PIPE TRENCHES				
	PSDB 8.3.2	Trench Excavations for restricted working width				
	8.3.2 (a)	Excavation in all materials for trenches, backfill, compact and dispose of surplus materials within 0.5 km for 200mm dia & smaller PE pipes and trench widths of 600 mm (min) and trench depths of :				
E.1.1		Exceeding 0,0m up to 1,5m				
E.1.2		Exceeding 1,5m up to 2,0m				
E.1.3		Exceeding 2,0m up to 2,5m	m	50		
	8.3.2(b)	Extra-over item DB 8.3.2(a) for:	m	29 300		
E.1.4		Intermediate Material	m	300		
E.1.5		Hard rock excavation				
	8.3.3	Excavation Ancillaries	m ³	6 500		
	8.3.3.1	Make up deficiency in backfill materials	m ³	500		
E.1.6		a) from other necessary excavations on site				
E.1.7		b) by importation from designated borrow pits	m ³	500		
			m ³	500		
TOTAL CARRIED FORWARD						

SCHEDULE 5

1200DB

1200 DB SUBSOIL DRAINAGE PIPELINES

BLOCK 6A - MAKATHINI

TOTAL BROUGHT FORWARD						
	Payment	Description	Unit	Quantity	Rate	Amount
E.2	8.3.4	Particular Items				
E.2.1	8.3.4(a)	Shore trench	m	10 000		
E.2.2	8.3.4(b)	Control of ground water	Day	150		
	8.3.6	Finishing				
	8.3.6.1	Reinstate road surfaces complete with all courses				
E.2.3		Gravel roads	m ²	3000		
	SANS 1200LB	BEDDING				
	8.2.1	Provision of bedding from trench excavation				
	8.2.1	Available from trench excavations within 0,5 km				
E.2.4		a) From commercial sources: Selected granular material Graded Riversand or Crushed Stone 6,7 - 13mm	m ³	1 770		
E.2.5		b) Selected fill material	m ³	2 000		
	8.2.5	Overhaul of material for bedding, cradle and selected fill blanket				
E.2.6		a) Selected granular material	m ³ .km	1 770		
E.2.7		b) Selected fill material	m ³ .km	2 000		
E.2.8	8.2.8	Controlled levelling & compaction of trench bottom	m ²	10 325		
	SANS 1200LE	PE DRAINAGE PIPES				
	8.2.15	Supply, lay join bed perforated subsoil PE drainage pipes, 100 Kpa, hoop stiffness heavy duty to SABS 1601-1994 for the following:				
E.2.9		110mm internal dia, perforated pipes	m	26 600		
TOTAL CARRIED FORWARD						

SCHEDULE 5

1200DB

1200 DB SUBSOIL DRAINAGE PIPELINES

BLOCK 6A - MAKATHINI

TOTAL BROUGHT FORWARD						
	Payment	Description	Unit	Quantity	Rate	Amount
E.3.1		160mm internal dia, perforated pipes	m	1 450		
E.3.2		200mm internal dia, perforated pipes	m	1 250		
	8.2.3	MANHOLES				
		Concrete Manholes				
	8.2.3.1	Supply and install 1,2m diameter pre-cast concrete manholes, complete with cover, frame and step irons, for the following depths.				
E.3.3		a) Depth 0,0m up to 1,5m	No.	10		
E.3.2		b) Depth 1,5m up to 2,0m	No.	320		
E.3.3		c) Depth 2,0m up to 2,5m	No.	30		
		Connections				
		Supply, lay join and bed PE subsurface drainage pipes, SABS 1601 - 1994 sewer pipes of the following connections, sloping and vertical:				
E.3.4		110mm x 110mm Ø junction	No.	100		
E.3.5		160mm x 110mm Ø at junction	No.	75		
	PSG 8.6	FOUNDATIONS				
E.3.6	8.4.4	Unformed surface finishes	m ³	360		
	8.2.3	END CAPS				
E.3.7		Supply all material and labour for the installation of the elbows to the 110mm diameter pipes and rodding-eyes complete within manhole junctions	No	720		
E.3.8	PSLE 8.2.18	a) Permeable material to subsoil eg. Selected granular material Approved Graded Riversand Crushed Stone 6,7 - 13mm	m ³	8 850		
CARRIED FORWARD TO SUMMARY						

SCHEDULE 6

1200 G

1200 G STRUCTURAL CONCRETE

BLOCK 6A - MAKATHINI

	Payment	Short Description	Unit	Qty	Rate	Amount
G.1.	SANS 1200G 8,2	STRUCTURAL CONCRETE FORMWORK		132		
	8.2.2	Smooth vertical formwork				
G1.1	8,3	REINFORCEMENT	m ²	0,4		
	8.3.	Steel bars		0,4		
	1	Mild steel		504		
G1.2		High tensile steel	t			
G.1.3		a) High tensile welded mesh sheets REF. 617 - (sheet 2,4 x 6,0)	t			
G1.4		b)	m ²	5		
	8.3.2	CONCRETE		87		
	8,4	Prescribed mix 1 : 3 : 6 concrete to fill cavities upon				
G1.5	8.4.1	Instruction of Engineer	m ³	38		
G1.6.		Blinding layer in 50mm thick concrete class 15/19	m ²	19		
	8.4.2	Strength concrete		54		
G1.7	8.4.3	Class 15/19				
G1.8	a)	Class 25/19	m ³	100		
G1.9	b)	Class 30/19	m ³			
	c)	Unformed surface finishes:	m ³			
G1.10	8.4.4	Wood floated finish				
	a)	MARK-UP RATES	m ²			
G1.11		Percentage markup on rates listed on term contracts				
		Percentage markup on items (with attached invoices) approved by the Employer or his representative for materials, (other than those set out in this list) used in execution of work ordered by the Employer	%			
G1.12		Employer	%			
CARRIED FORWARD TO SUMMARY						

CONSTRUCTION OF SUBSURFACE DRAINAGE - MAKHATHINI IRRIGATION SCHEME

BLOCK 6A - JOZINI - UMKHANYAKUDE DISTRICT

SECTION	SUMMARY OF SCHEDULES	AMOUNT
1. - 1200	SUMS STATED PROVISIONALLY BY ENGINEER	R -
2. - 1200A	1200A. GENERAL REQUIREMENTS AND PROVISIONS	R -
3. - 1200C	1200C. SITE CLEARANCE	R -
4. - 1200D	1200D. EARTHWORKS	R -
5. - 1200DB	1200DB. AGRICULTURAL INFIELD SUBSOIL DRAINAGE LINES	R -
6. - 1200G	1200G. STRUCTURAL CONCRETE	R -
SUB TOTAL 03		R -
		15% VAT
ESTIMATED CONTRACT VALUE		R -

Sum stated provisionally :

- 1) Community Liaison Officer
- 2) Overheads, charges and profit : %
- 3) The Contractor will pay the remuneration of the CLO & farmers agricultural practice re-instatement after construction
A provisional sum has been provided for these expenditures

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CONSTRUCTION OF MAKATHINI BLOCK 6A INFRASTRUCTURE

1. CONCRETE BUTTRESS WEIR OUTLET STRUCTURE
2. AGRICULTURAL INFIELD SUBSURFACE DRAINAGE
3. 2 x VEHICLE CULVERT CROSSINGS
4. REMEDIAL REPAIRS TO EXISTING CONCRETE STORMWATER CANAL

TENDER BOOK OF DRAWINGS - DRAWING LIST:

DRAWING NUMBER	DRAWING DISCRIPTION	REVISION
KZNDARD/MAK/BL6/000	Cover page	
KZNDARD/MAK/BL6/001	Locality Map	T0
KZNDARD/MAK/BL6/002	Site Map	T0
KZNDARD/MAK/BL6/003	Subsurface Drainage - System Layout	T0
KZNDARD/MAK/BL6/004	Subsurface Drainage - Typical sections	T0
KZNDARD/MAK/BL6/005	Subsurface Drainage - General Notes	T0
KZNDARD/MAK/BL6/006	Subsurface Drainage - Envelope Material Notes	T0
KZNDARD/MAK/BL6/007	Subsurface Drainage - Manholes Detail	T0
KZNDARD/MAK/BL6/008	Subsurface Drainage - Excavation Detail	T0
KZNDARD/MAK/BL6/009	Subsurface Drainage - Construction Guidelines	T0
KZNDARD/MAK/BL6/010	Storm Water Canal - Drainage Pipe Junction & Remedial Works	T0
KZNDARD/MAK/BL6/011	Storm Water Canal - Vehicle Crossing - 1	T0
KZNDARD/MAK/BL6/012	Storm Water Canal - Vehicle Crossing - 2	T0
KZNDARD/MAK/BL6/013	Remedial Works - Existing Concrete Storm Water Canal	T0
KZNDARD/MAK/BL6/014	Outlet Structure - Buttress Weir (part 1)	T0
KZNDARD/MAK/BL6/015	Outlet Structure - Buttress Weir (part 2)	T0

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DIRECTORATE : ENGINEERING & SOIL CONSERVATION
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Notes & Reference drawings

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Project :

**MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE**

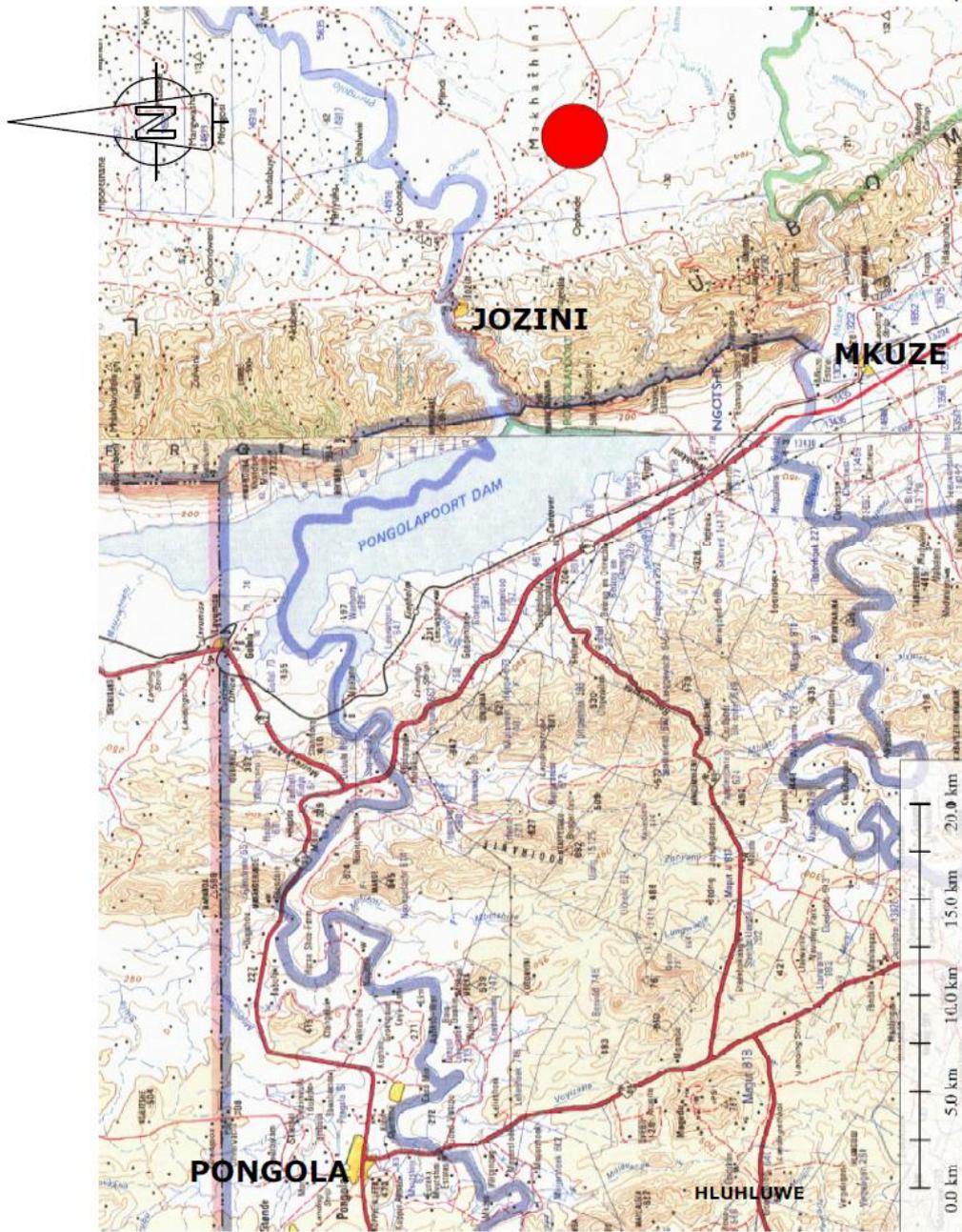
Drawing description

DRAWING LIST

Scale	NTS	Date	20/01/2020
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Drawing number	KZNDARD/MAK/BL6/000
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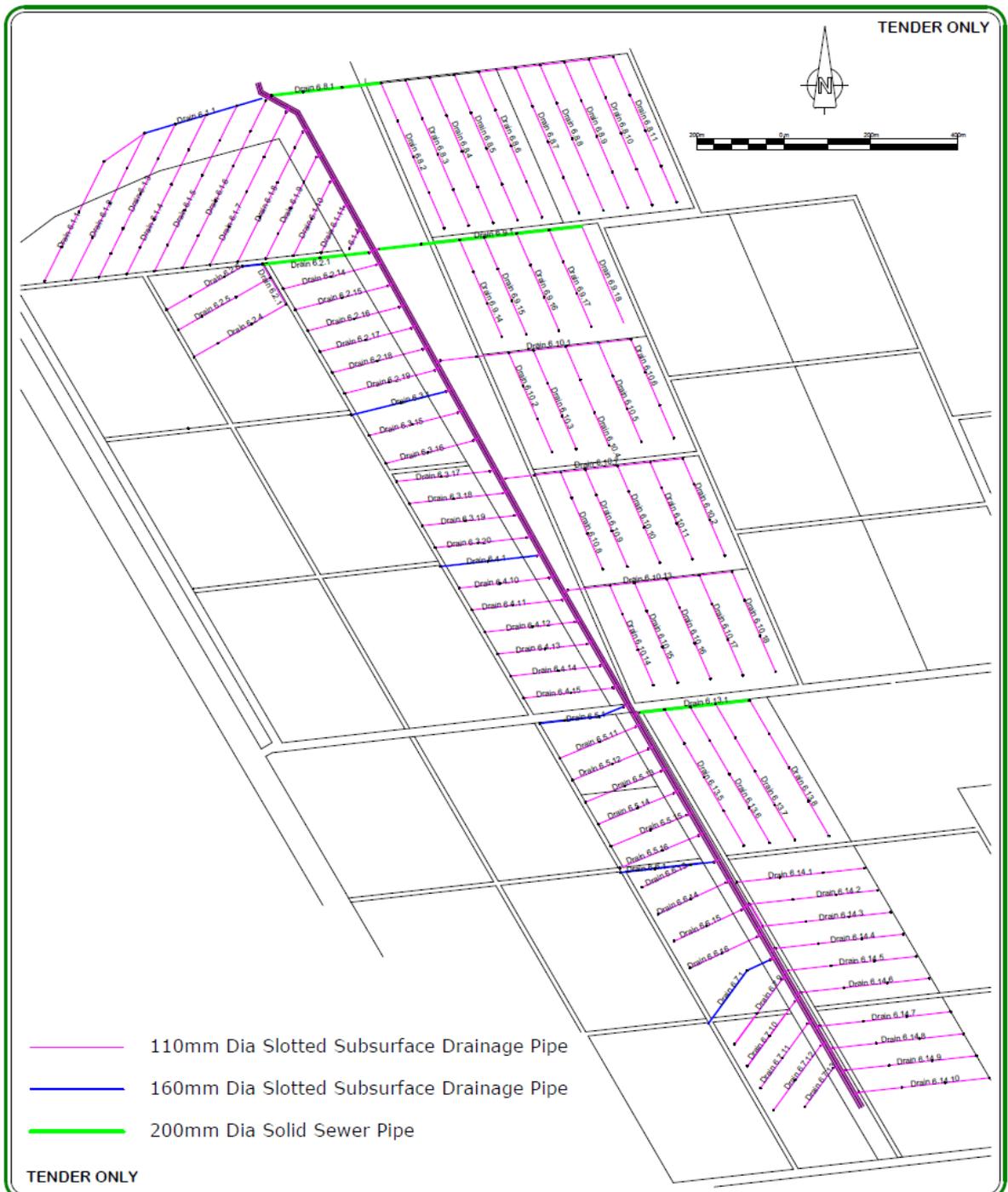
Notes & Reference drawings		
No.	Description	
Amendment		
No.	Date	Checked By
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Project :
**MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE**
Drawing description
LOCALITY MAP

Scale	NTS	Date	20/01/2020
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Drawing number
KZNDARD/MAK/BL6/001

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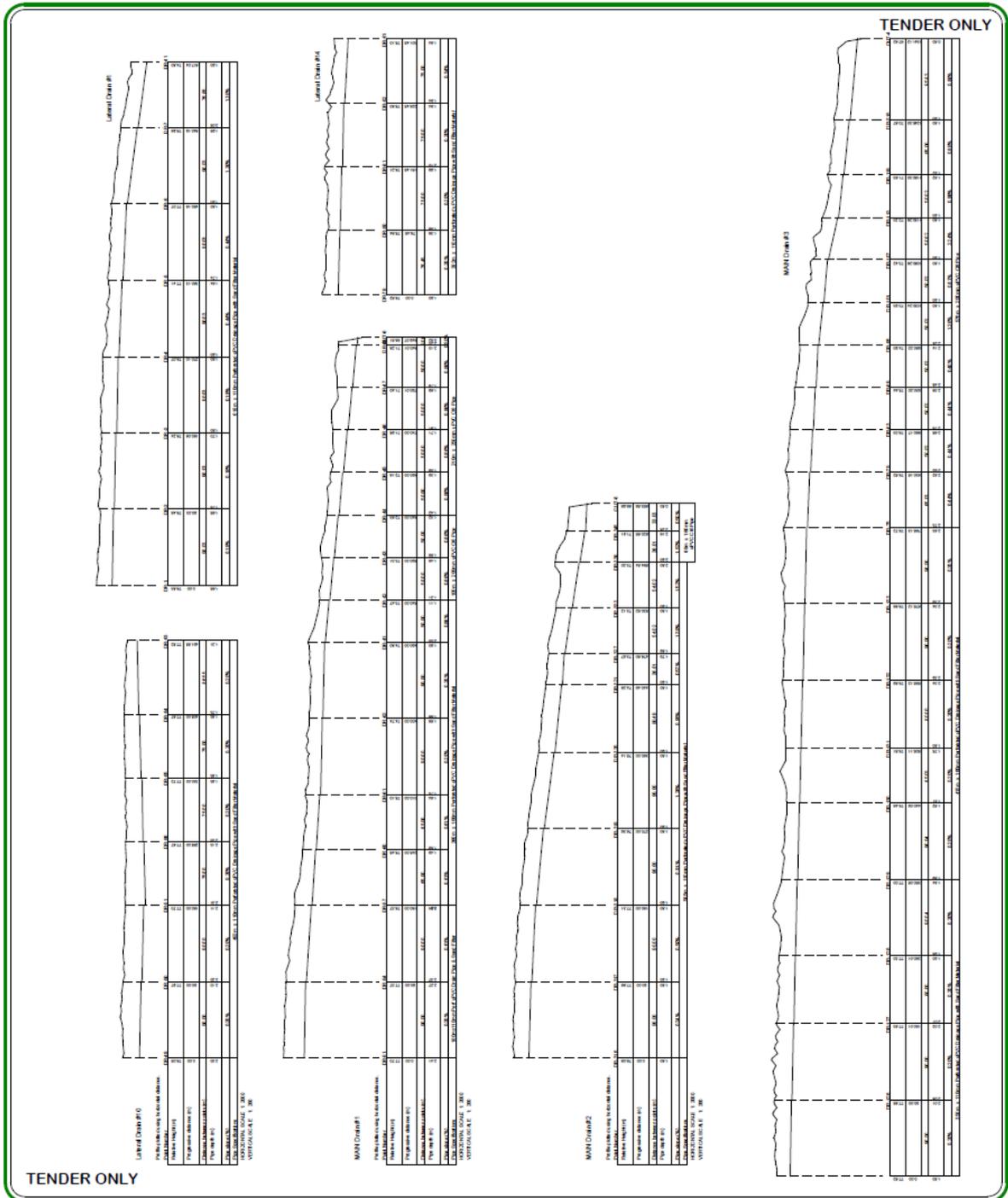
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Project :
MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE
 Drawing description
SYSTEM LAYOUT

Scale	Date
See Graphical	
Drawing number	
KZNDARD/MAK/BL6/003	



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Project : **MAKATHINI BLOCK 6A SUBSURFACE DRAINAGE**

Drawing description
TYPICAL SECTIONS
 FINAL DRAWINGS WILL BE PROVIDED

Scale	NTS	Date
Drawing number	KZNDARD/MAK/BL6/004	

NOTES :-

Ideally, all construction should follow a definite plan that has been prepared in advance in consultation with the project engineer. The plan should include profiles and construction notes for all mains and submains and a map showing the locations, sizes, and grades of all lines and other components. The map also should show physical features so that components of the system can be readily located in the future for repairs and maintenance. The location of buried cables, pipelines, or other utilities also should be noted (long before construction begins, the contractor should obtain any necessary permission or easements that might be required to cross the land of other owners, roads, etc.).

The contractor should carefully examine the plan before work is begun and should not proceed with installation until the authorities have marked the location of any buried obstacles at points where drains are to be constructed. As the work proceeds, the contractor should be careful to note on the plan and map any modifications in the design that are necessitated in the field, especially any changes in grade. Once the job is completed, the contractor should provide the engineer with an as-built plan.

Safety

Observe safety standards for persons and machines. Persons working in trenches should be protected from cave-ins, and they should not work alone. Moving parts of machinery should be protected by proper guards. Persons observing the work should not be permitted to come close to the excavating operation.

Trench method of installation

Construction of the trench should begin at the outlet and proceed up grade. Align trenches in such a way that the drain can be laid in straight lines or in smooth curves. The width of the trench at the top of the drain should be the minimum required to permit installation and enable the bed to support the load on the drain. But there should be at least 150mm of clearance on either side of the drain.

Tile should be bedded in an earth foundation that is shaped to fit the lower part of the pipe. The foundation can be shaped in this way with most trenching machines. If you dig the trench with a backhoe, you will have to hand grade and shape the trench bottom to fit the pipe.

If the drain is to be laid in a rock-cut, the trench should be overexcavated to a depth of 150mm below grade level; this space should be filled with graded sand and gravel or well-pulverized soil and tamped enough to provide a firm foundation. Then, the bottom of the trench should be shaped and leveled to grade. The trench should be filled with designed bedding or envelope material to the top of the rock-cut. Where the trench bottom is unstable, as in fine sandy soils be extremely careful to keep sediment from entering the drain and to provide a firm foundation for the drain.

Installing the subsurface drains

Listed below are some guidelines to follow when installing drains:

1. Remove all soil or debris inside drains before installation.
2. Make sure the drain is free from clinging wet material that could hinder laying the drain on grade.
3. Begin laying tile or tubing at the outlet and progress up grade. If possible, place the drain inside the shoe casing of the trencher during the trenching operation.
4. Automatic drain-laying devices are acceptable, provided that they can lay the drain according to the requirements stated in this publication.
5. Lay bedding in the groove and pipe on a firm bed that is free of loose soil on the planned grade.
6. Hold plastic tubing in position on grade immediately after installation by careful placement of blinding material.
7. Where lengths of plastic tubing are to be joined, cut the ends square and remove all ragged or burred edges. Use a plastic coupling to
8. secure the ends of the tubing in proper alignment and to prevent the joint from separating during installation.
10. Before work is suspended for the day, blind and backfill all drains laid in trenches.
11. Close any open ends tightly with an end plug. Use continuous pipe when in areas closer than 30 meters of trees.
12. Any stretch that occurs during installation of pipe will decrease its strength somewhat and may pull perforations open wider than is desirable. The amount of stretch that occurs during installation depends on the temperature of the tubing at the time it is installed, the amount and duration of drag that occurs when the Pipe is fed through the installation equipment, and the stretch resistance of the tubing. The drainage pipe should not be stretched so much that its stiffness is reduced to less than the minimum allowable pipe stiffness. Stretch, which is expressed as a percentage increase of length, should not exceed 5 percent.

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Inspection of materials

The contractor should inspect construction materials before and during installation. All materials should be satisfactory for the intended use and should meet the requirements described in the Materials section of this publication, and any additional requirements of the contract. Reject any defective or damaged drain pipe; remove defective or damaged sections of plastic pipe. Make sure that the perforations in the plastic drainage pipe are of the proper size.

Storage of materials

Drainage materials should be protected from damage during handling and storage. The storage area should be dry, well drained, and free of rodents, vegetation, and fire hazards.

Take more precautions to protect plastic tubing. Where rodents could be a problem, we recommend that you use end caps. Since pipe can be harmed by excessive exposure to ultraviolet rays, protect it from sunlight when it is to be stored outside for a long period.

TRENCH AND EXCAVATION SAFETY MANAGEMENT

Collapse :-

Excavation sides can be protected by battering the sides to a safe angle, supporting them with shuttering and sheeting, the use of trench boxes or hydraulic support systems.

People falling in :-

Substantial barriers (guardrail, intermediate rail, toe board), warning tape and signs should be provided where there is a risk of persons falling.

Materials falling in :-

Excavated soil, materials and effluent should be placed at a safe distance from the excavations as the extra weight can contribute to a collapse.

Vehicles on the rim :-

Stop-blocks should be placed about 1.5 metres from an excavation to prevent vehicles falling or surcharging (collapse due to weight pressure).

Service line risks :-

Electrical cables, water piping, telecom lines, manholes and other services must be located. Safe digging practice must be used, including metal detection.

Hazardous atmospheres :-

Noxious or flammable gases could occur naturally in an excavation. Methane is odourless but could cause severe cramps on inhalation. Stop the work if cramps occur.

Undermining adjacent structures :-

If there is any doubt that an excavation could undermine an adjacent structure, an engineer should be consulted prior to starting work.

MORE TRENCH SAFETY MEASURES

- The sides of the trench should be more than 15 degrees from vertical
- Bench or batter the sides.
- Excavator operators must be supervised.
- Supervisors must have the authority and means to prevent workers from entering the trench.
- Responsibilities for inspection of excavation must be clearly designated.
- A work permit system must be fully applied.
- Risk assessment for excavation must be extensive, including soil conditions, equipment and experience.
- Workers must be trained on their jobs and on the risks.
- Competency of plant operators must be assessed and permitted.
- Regular inspections and audits must include compliance to excavation laws and all aspects of operational procedures.
- Managerial and disciplinary procedures must be consistent.
- When new risks are identified, work must not proceed until a review of the risk assessment is completed by specialists, and the recommended measures are taken.

TRENCH WORK LAWS

OHS Act , 8 (2)(b) Employers must take steps to eliminate hazards. Section 14 on General Duties of Employees at work. Every employee has a duty to (a) take reasonable care of themselves, (c) obey health and safety rules. Construction Regulations; CR 7 Risk assessment, (4) ensure that employees are informed, instructed and trained by a competent person regarding hazards and related work procedures.



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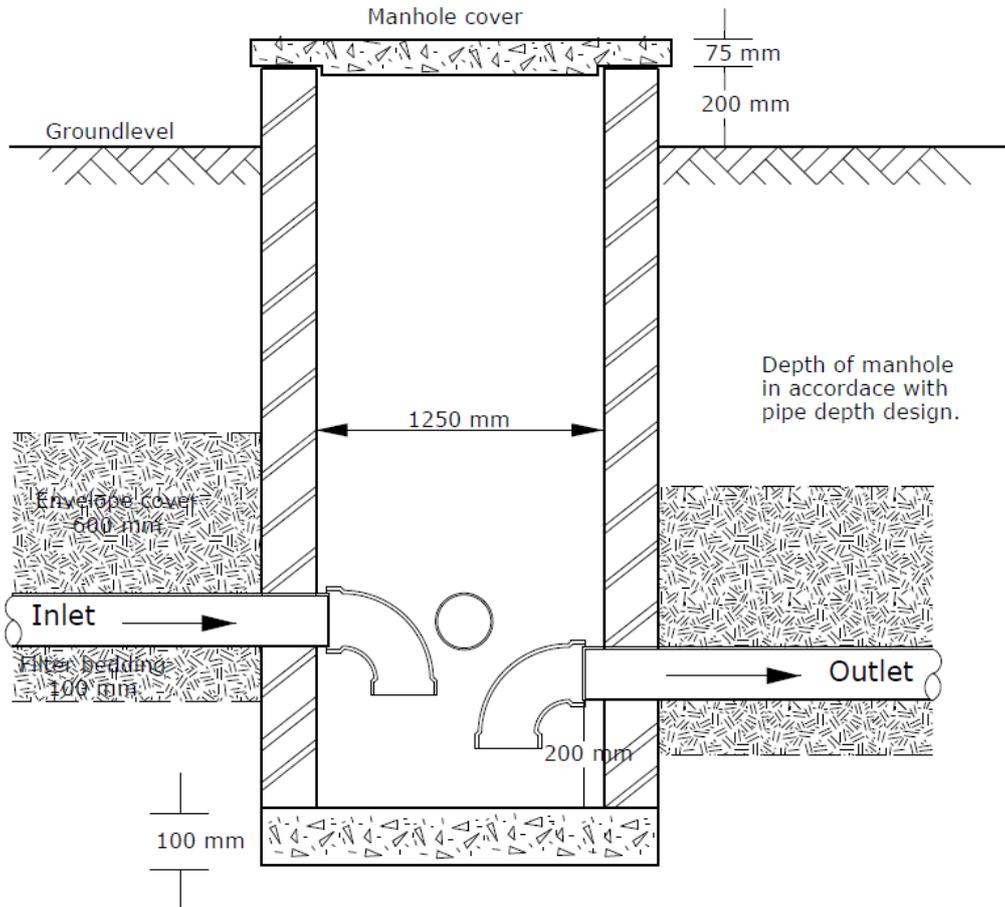
Project :
MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE

Drawing description

GENERAL NOTES

Scale: NTS Date:

Drawing number:
KZNDARD/MAK/BL6/005



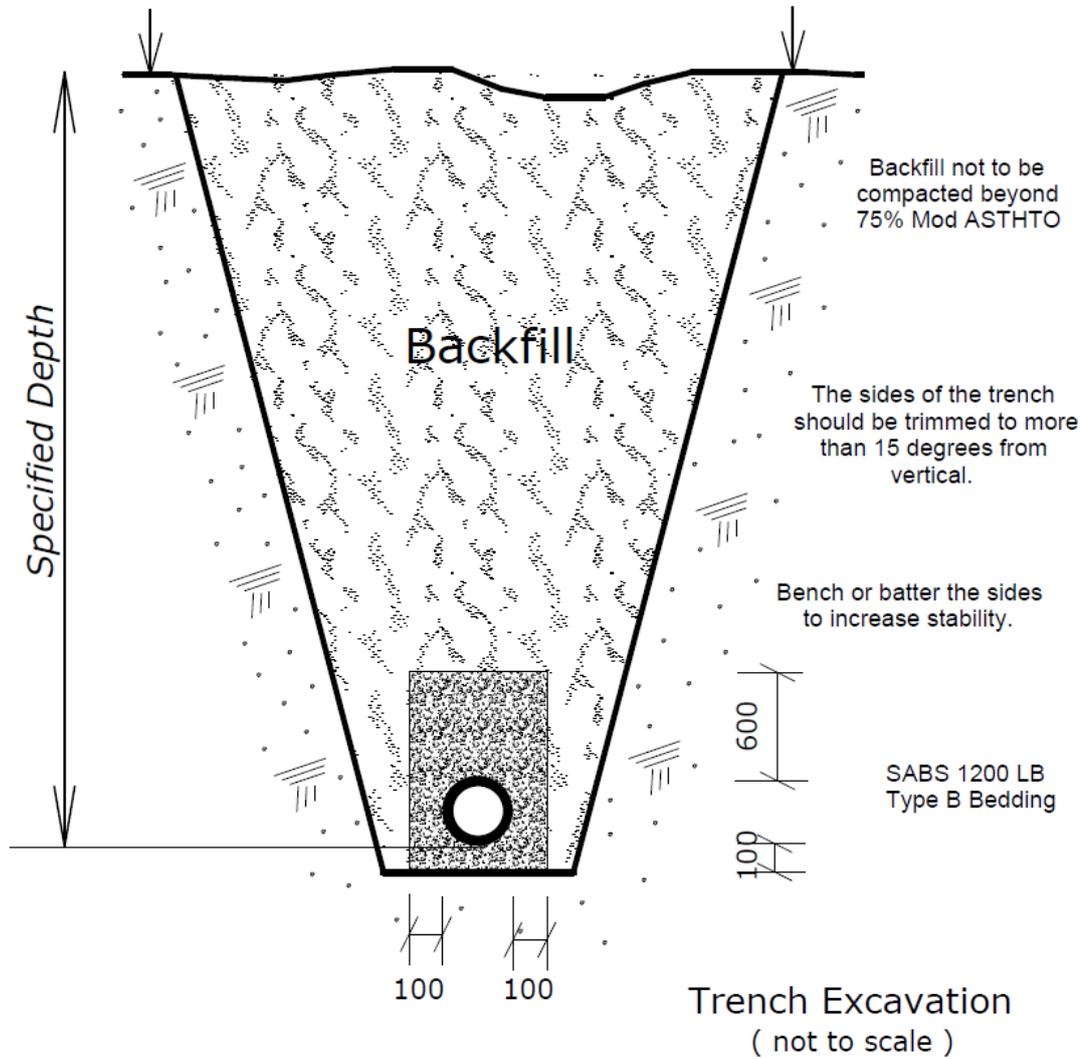
Manhole detail
(not to scale)

Check the slope and depth of the pipe at regular intervals. Due to the extent and nature of these works, regular intermediate inspections needs to be arranged. No excavation should be backfilled without the verification and inspection of the required filtermaterial cover by the Resident project Engineer. Regular maintenance should be done on the system after installation completion. Written consent is required from the authority / land user concerned to authorise you to lay the pipeline(s) within arable lands , infield roads, canals or other fixed structures.

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No.	Date	Checked By																	
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NTS	Date																		
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Department: agriculture & rural development
PROVINCE OF KWAZULU-NATAL

DISTRICT : - UMKHANYAKUDE
Local office :- JOZINI

DIRECTORATE : ENGINEERING & SOIL CONSERVATION
PRIVATE BAG X9059, PIETERMARITZBURG, 3200
TEL: 033-3559331, FAX: 033-3559330

Notes & Reference drawings

No.	Description	
Amendment		
No.	Date	Checked By

Nov 2019 JM Van Der Merwe

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Project :
MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE

Drawing description

EXCAVATION DETAIL

Scale NTS Date

Drawing number
KZNDARD/MAK/BL6/008

Subsurface drainage caution Notes :

Construction to commence when the watertable is deep.

Start the excavation from the outlet onwards.

Limit the width of the trench to reduce excavation cost.

Avoid over excavation as this then has to be re-filled with filter material and not insitu material.

Avoid compacting of the trench invert as this reduces the permeability of the subsoil.

Depth is measured from the soil surface to the bottom of the drainage pipe.

Prevent fine-grained soil particles from entering drain.

Filtermaterial to conform to the prescribed spesification. Place the course filtersand at least 100mm around the pipe. Regular random samples will be analysed by the Department of Agriculture for approval thereof.

Check the slope and depth of the pipe at regular intervals.

Due to the extent and nature of these works, regular intermediate inspections needs to be arranged.

Department of Agriculture should be informed of the work progress on a weekly basis.

Regular maintenance should be done on the system after installation completion.

After installation 2 ton gypsum per hectare should be applied to the land.

General Notes

- Contractors to verify all levels, heights and site dimensions and to check same against drawings before putting any work in hand
- Any discrepancies to be reported to the Engineer immediately for clarification
- This drawing is not to be scaled - figured dimensions to be used at all times
- All work to be carried out in strict accordance with local authorities requirements, National Building Regs and relevant SABS standard
- This drawing is to be read in conjunction with all relevant consultants drawings, details and specifications or schedules as applicable
- Only the latest revision is to be used
- COPYRIGHT AND RIGHT OF REPRODUCTION OF THIS DRAWING RESERVED

CONSTRUCTION NOTES

Excavation of trenches

A recommended alignment and grade of trench is established by the engineer in charge of the project.

The width of the trench should be kept to a minimum allowing just sufficient working area for jointing and initial compaction around the pipe.

For most purposes a trench 300mm wider than the diameter of the pipe allows enough room for jointing. It is important that the trench is not opened too far in advance of the pipe laying operation. Pipes must be partly backfilled immediately after laying.

Trench preparation

The trench bed must be free from all stone or hard projections which are likely to cause damage to the pipe.

The bottom of the trench should be backfilled to a depth of 100mm, with suitable filter material such as free drainage coarse sand.

The bedding should be carefully placed to produce a level uniform bed onto which the pipe is directly laid.

Pipe laying

The pipeline must be laid directly on the prepared bedding in the trench and any temporary supports, bricks or other foreign hard bodies must be removed.

Perforated pipe should be placed with the majority of the slotted openings facing down.

Backfilling

It is essential that PVC pressure pipes are backfilled immediately after each pipe is installed, in order to contain the expansion and contraction to each individual pipe length where it is catered for by the socket.

Trenching, bedding and backfilling to be carried out according to SANS 2001:2010 or as specified in the contract documentation

Side-filling and Initial backfilling

Check that the pipe rotation mark is correct to ensure the majority of the openings / perforations facing down.

Selected material (as for bedding) should be placed gently and evenly in uncompacted layers of 100mm in thickness between the sides of the trench and the pipe.

Tamp each layer firmly with a hand tamper until the level of the crown of the pipe is reached, taking care to ensure that no voids are left under the pipe.

Movement of the pipe should be prevented by the simultaneous filling and even compaction of material on either side of the pipe.

Filter material should be placed in even and uncompacted layers of 150mm in thickness over the entire width of the trench to a height of 600mm above the crown of the pipe.

Main backfill

The remainder of the trench should be filled in layers of 300mm thickness and excavated trench material can be used.

Each layer must be firmly tamped, the first layer by hand and subsequent layers by mechanical means if so desired.

Refer to SANS 2001 DP2: 2010.



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Project :

MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE

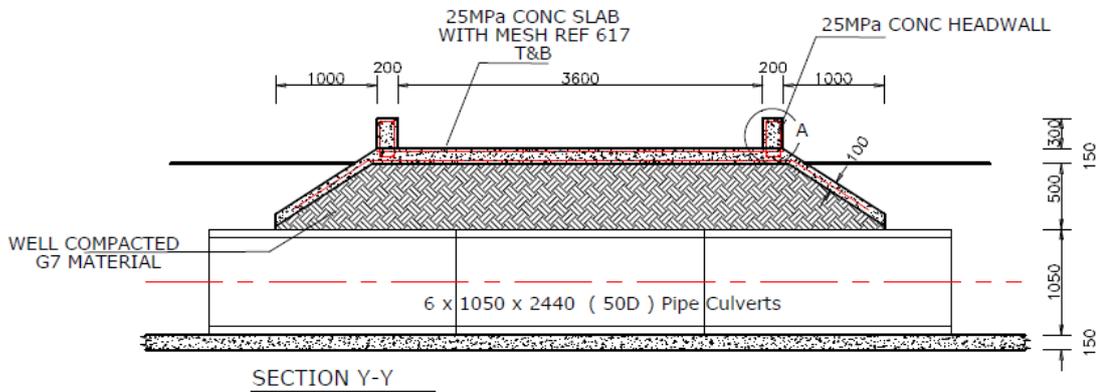
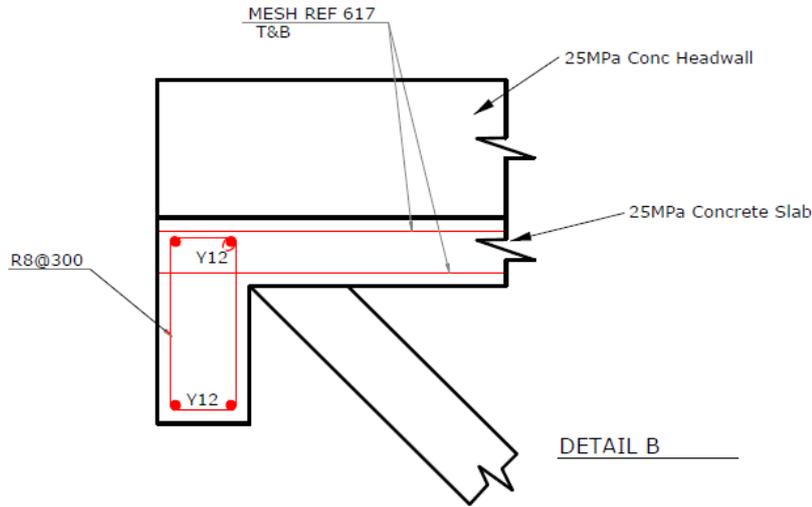
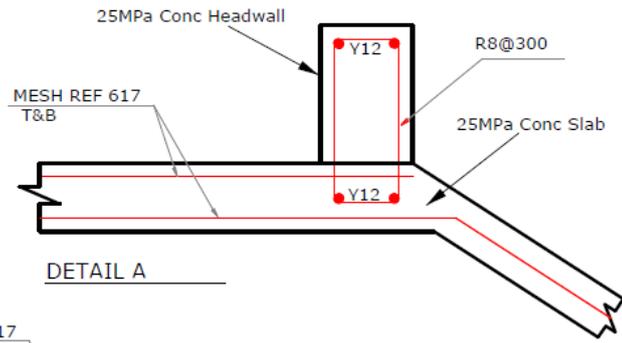
Drawing description

**CONSTRUCTION
GUIDELINES**

Scale NTS Date

Drawing number
KZNDARD/MAK/BL6/009

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Project :

MAKATHINI BLOCK 6A
SUBSURFACE DRAINAGE

Drawing description

Existing Storm Water Canal
Vehicle Crossing - 2

Scale

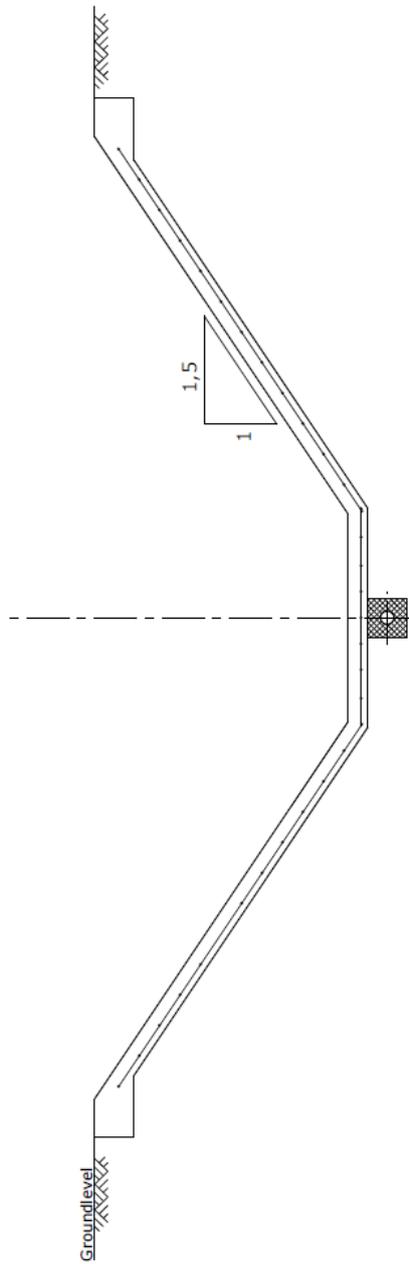
NTS

Date

Drawing number

KZNDARD/MAK/BL6/012

TENDER ONLY



TYPICAL REMEDIAL WORKS REQUIRED TO CONCRETE DRAINAGE CANAL

1. ADD MISSING CONCRETE PANELS.
 2. GENERAL- GROUT AROUND SUB-SOIL DRAIN INLETS INTO CANAL
 3. ADD INCOMPLETE DRAINAGE PIPE JUNCTIONS.
 4. REMOVE SOIL & DEBRIS DEPOSITS IN THE EXISTING CANAL.
 5. INSTALLATION OF EMERGENCY ACCESS LADDERS WITHIN EXISTING CANAL
 6. REPAIR / REPLACE CRACKED & DAMAGED PANELS.
 7. BACKFILL BEHIND CONCRETE PANELS.
 8. CONSTRUCT 2 CULVERT / BRIDGE CROSSINGS.
- INDIVIDUAL ITEMS ABOVE ARE NOT QUANTIFIED AND A PROVISIONAL AMOUNT IS ALLOCATED.

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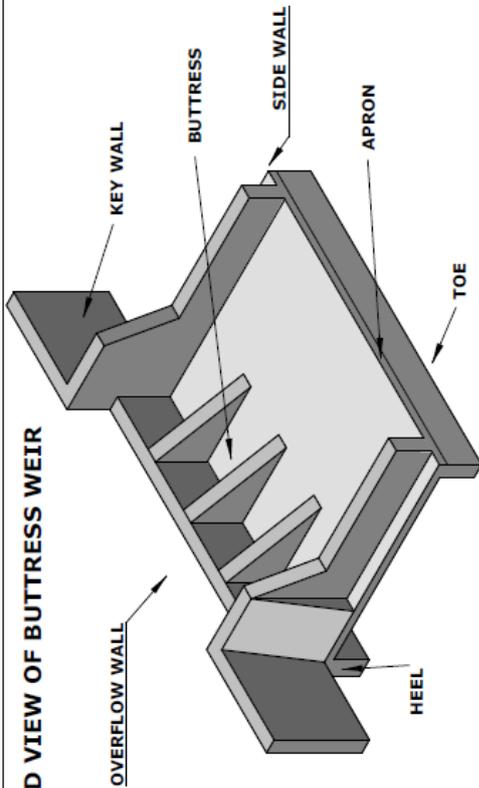
Project :
MAKATHINI BLOCK 6A SUBSURFACE DRAINAGE

Drawing description
Existing Concrete Canal Remedial Works

Scale	Date
NTS	

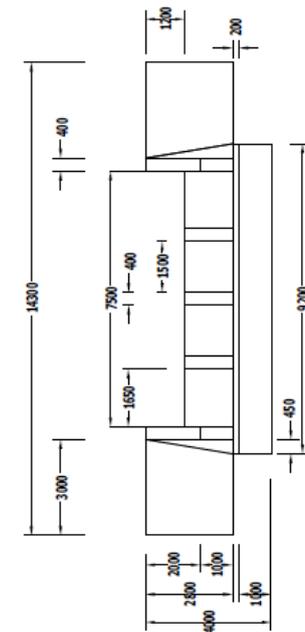
Drawing number
KZNDARD/MAK/BL6/013

3D VIEW OF BUTTRESS WEIR

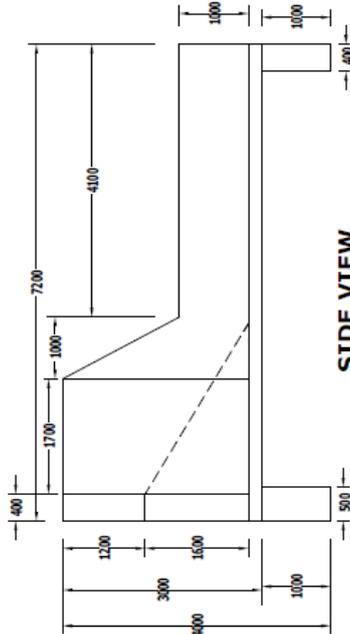


SPECIFICATION

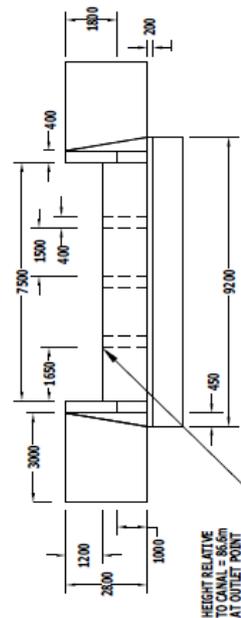
1. Concrete mix with a 30 MPa curing strength
2. Structure to be built according to plans and specifications
3. Backfill compacted to 90% Mod AASTO
4. Before casting of concrete the soil must be wetted thoroughly
5. Curing of structure must continue 7 days after casting
6. The Spillway and Key walls must be casted as a unit
7. The Toe, Apron and Heel must be casted as a unit
8. The Side walls and Buttress must be casted on top of the Apron
9. The Weir Structure to be Cast at the canal outlet



FRONT VIEW

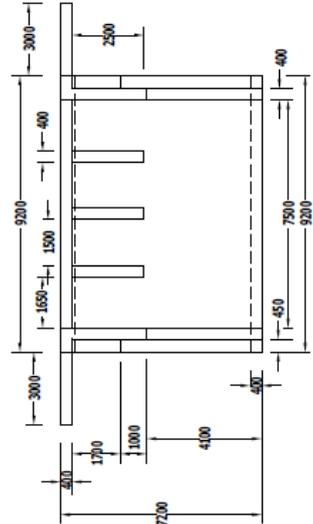


SIDE VIEW



BACK VIEW

HEIGHT RELATIVE TO CANAL = 86.5m AT OUTLET POINT



TOP VIEW

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BILL OF MATERIALS

No. ITEM.	UNIT.	QUANTITY.
1. Overflow Wall	m ³	4.80
2. Key walls	m ³	6.72
3. Heel	m ³	4.60
4. Toe	m ³	3.68
5. Apron	m ³	13.25
6. Buttresses	m ³	6.00
7. Side walls	m ³	10.15
8. Total concrete	m ³	49.22



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No. _____
 Notes & Reference drawings
 Description

Amendment

No. Date Contact Designed Drawn

Dec 2009 T. Jooat M. Van Der Merwe

Project : MAKATHINI BLOCK 6A
 STORMWATER CANAL OUTLET

Drawing description
BUTTRESS WEIR SPECIFICATION

Scale NTS Date 09/12/2019

Drawing number
 KZNDARD/MAK/BL6/014

PART F

BID EVALUATION CRITERIA

1. **Compliance with Special terms and Conditions**
Only bids that meet the Special Terms and Conditions in all aspects as stipulated in the bid document shall be considered.
2. **Correctness of information**
All information required in the bid document must be accurate and duly completed including all the appropriate signatures. The Department reserves the right to verify all information submitted. Non-compliance with the above shall result in elimination from further processes
3. **Compulsory administrative compliance documents that must be submitted with the bid:**
 - 3.1 Central Suppliers Database registration number;
 - 3.2 A certified copy of a valid BBBEE certificate or valid sworn affidavit for purposes of confirmation of the bidder being a **Level 1 BBBEE**;
 - 3.3 Documentary proof of bidder being an **EME** or **QSE** (e.g. Financial Statement);
 - 3.4 Documentary proof of bidder's experience in support of **Annexure C**

NB. Non-submission of any of the above documents will result in disqualification.

Where copies of original documentation are submitted, those copies must be certified and must not be copies of certified copies. Original certification should not be older than three (3) months. Failure to comply with this requirement shall invalidate the bid submitted.

4. **Proof / evidence that must be submitted to enable scoring on functionality:**
 - 4.1 Bidder's experience in the construction of Civil Engineering work;
 - 4.2 Documentary proof of credit facility with registered supplier/manufacturer and/or registered Financial Institution or evidence of access to any legal funding instrument;
 - 4.2 Access to transportation facility;
 - 4.3 Proof of physical address;
 - 4.4 Company profile with detailed CVs and traceable references;
 - 4.5 Project implementation plan
5. **Functionality evaluation:**
 - 5.1 The bid documents shall be evaluated individually on score sheets, by a representative evaluation panel, according to the below mentioned evaluation criteria.
 - 5.2 All service providers who score less than minimum functionality score of 70 shall not be considered for the work
 - 5.3 The evaluation criteria are as in Table 1 below.

TABLE 1: BID EVALUATION CRITERIA

	FUNCTIONALITY EVALUATION CRITERIA	Max Points	Evidence	Bidders Score
1.	Bidder's experience in the construction of any Civil Engineering work for Agricultural, Domestic, Industrial, Institutional or Commercial Occupancies (5 Points per project, to the maximum of 5 projects)	25	Completion Certificate (Works or other) In support of Annexure C	
2.	Financial Capacity Total Credit Facility (with financial institution and/or supplier/manufacturer of Drainage or irrigation material) R7.5 million or more = 25 points	25	Evidence of credit facility with manufacturer/supplier and/or Registered Financial Institution Or Evidence of access to any legal funding instrument (e.g. Letter of intent)	
3.	Access to a transportation facility (Construction Equipment)	10	Letter of commitment from fleet company Or Confirmation from producer that delivery shall also be undertaken Or Documentary proof of transport or transportation facility (Log Books/ Letter of agreement supported by Log book)	
4.	Proof of Physical address Office of Bidder outside borders of KZN = 5 pts Office of Bidder within borders of KZN = 20 pts	20	Lease agreement; Municipal Utility Bill; or Copy of Bank Statement (first page only) with address	
5.	Company Profile Detail company profile indicating the HR personnel (CV's) of the company with traceable references in implementing civil works which are related to agricultural infrastructure project	10	Company Profile (CV documents with Traceable Reference)	
6.	Methodology The bidder is required to provide a Project Implementation Plan with the following minimum activities (Team Qualification and Specialist) 1. Engineers 2. Geotechnical 3. Soil Analytical services 4. Social Facilitation	10	Project Implementation Plan	
	TOTAL	100		
	Minimum Functionality Threshold	70		

ANNEXURE C : EXPERIENCE

Please indicate your experience and expertise by completing the table:

No	Name of project + Period	Project description	Role (self or sub- contracted)	Project value	Name and contact number of referee
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					