



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

REQUEST FOR BID

WP11393

CROCODILE EAST WATER PROJECT: MODULE 1: TECHNICAL FEASIBILITY STUDY

ISSUE DATE:

19 JULY 2021

CLOSING DATE AND TIME

27 AUGUST 2021 at 11H00

DUE TO THE COVID 19 RESTRICTIONS, THERE WILL BE NO BRIEFING SESSION.

**N.B: ALL PROSPECTIVE BIDDERS ARE REQUESTED TO SUBMIT/ PROVIDE BOTH
HARD COPY AND A SOFTCOPY ON A USB OR DISC OF THEIR COMPLETE BID
DOCUMENT. THIS IS DUE TO THE CURRENT PREDICAMENT WE FIND OURSELVES
IN DUE TO COVID 19.**

SUBMIT TENDER DOCUMENT

POSTAL ADDRESS:

DIRECTOR-GENERAL: WATER AND
SANITATION
PRIVATE BAG X 313 PRETORIA, 0001

OR

TO BE DEPOSITED IN:

THE TENDER BOX AT THE
ENTRANCE OF ZWAMADAKA
BUILDING 157 FRANCIS BAARD STREET
(FORMERLY SCHOEMAN STREET)
PRETORIA

TENDERER: (Company address and stamp)

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	WP11393	CLOSING DATE:	27 AUGUST 2021	CLOSING TIME:	11:00
DESCRIPTION	CROCODILE EAST WATER PROJECT: MODULE 1: TECHNICAL FEASIBILITY STUDY				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
TENDER BOX AT ZWAMADAKA BUILDING, 157 FRANCIS BAARD STREET (FORMERLY SCHOEMAN STREET)					
PRETORIA, 0002					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Zelda Phiri		CONTACT PERSON	Mr JA Bester	
TELEPHONE NUMBER	012 336 7954		TELEPHONE NUMBER	012 336 8071	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	phiriz@dws.gov.za		E-MAIL ADDRESS	bestera@dws.gov.za	
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]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES <input type="checkbox"/> 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.					

PART B 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:

.....

PRICING SCHEDULE

(Professional Services)

CROCODILE EAST WATER PROJECT: MODULE 1: TECHNICAL FEASIBILITY STUDYNAME OF BIDDER:PROJECT NO: **WP11393**CLOSING TIME: **11:00 AM**CLOSING DATE: **27 AUGUST 2021**OFFER TO BE VALID FOR **120 DAYS** FROM THE CLOSING DATE OF BID.**ITEM DESCRIPTION BID PRICE IN RSA CURRENCY (ALL APPLICABLE TAXES INCLUDED)**

1. The accompanying information must be used for the formulation of proposals.

2. Bidders are required to indicate a ceiling price based on the total
Estimated time for completion of all phases and including all
Expenses inclusive of all applicable taxes for the project.

R.....

3. PHASE ACCORDING TO WHICH THE PROJECT WILL BE
COMPLETED, COST PER PHASE AND MAN-DAYS TO BE
SPENT

..... R..... Days

..... R..... Days

..... R..... Days

3.1. Travel expense (specify, for example rate/km and total km, class
Of air travel, etc.). Only actual costs are recoverable. Proof of the
Expenses incurred must accompany certified invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED
AMOUNT

RATE

QUANTITY

..... R..... R.....

..... R..... R.....

..... R..... R.....

TOTAL: R.....

"all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

- 3.2. Other expenses, for examples accommodation (specify, e.g. Three Star hotel, bed and breakfast, telephone cost, reproduction cost, etc.).
On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.

DESCRIPTION OF EXPENSE TO BE INCURED	RATE	QUANTITY
.....	R.....
.....	R.....
.....	R.....

TOTAL: R..... ,

4. Period required for commencement with project after
Acceptance of bid

.....

5. Estimated man-days for completion of project

.....

6. Are the rates quoted firm for the full period of contract?
*YES/NO

7. If not firm price period, provide details of the basis on which
Adjustments will be applied for, for example consumer price index.

.....

.....

.....

.....

Any enquiries regarding bidding procedures may be directed to:

Department: Department of Water and Sanitation

Contact Person: Zelda Phiri

Tel: 012 336 7954

E-mail address: phiriz@dws.gov.za

Any enquiries regarding technical information may be directed to:

Contact Person: Mr JA Bester

Tel: 012 336 8071

Cell:082 517 5560

E-mail address: bestera@dws.gov.za

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 an advertised competitive bid, a limited bid, a proposal or written price quotation). 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, member):
.....

2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:
.....

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:

Name of person / director / trustee / shareholder/ member:

Name of state institution at which you or the person

Connected to the bidder is employed:

Position occupied in the state institution:

Any other 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 attach 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? If so, furnish particulars. **YES/NO**

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

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract? **YES/NO**

2.11.1 If so, furnish particulars:

3 Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	Personal Income Tax Reference Number	Employee Number / Persal Number

4 DECLARATION

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT. I
ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME
SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

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)

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.

1.2 Points for this bid shall be awarded for:

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

1.3 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

1.4 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.

1.5 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:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) & \text{or} & P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \end{array}$$

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 10 or 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:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- 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 *audialterampartem* (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 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-
- abused the institution's supply chain management system;
 - committed fraud or any other improper conduct in relation to such system; or
 - 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	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). 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.	+	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	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.	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. disregard 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.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a 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

GOVERNMENT PROCUREMENT GENERAL CONDITIONS OF CONTRACT

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and**
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.**

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- ☐ **The General Conditions of Contract will form part of all bid documents and may not be amended.**
- ☐ **Special Conditions of Contract (SCC) relevant to a specific bid, should be compile separately for every bid (if (applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.**

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General Conditions of Contract

1. Definitions 1. The following terms shall be interpreted as indicated:

- 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
- 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- 1.6 "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 recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7 "Day" means calendar day.
- 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
- 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
- 1.11 "Dumping" occurs when a private enterprise abroad market its goods 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.
- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "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.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.

- 1.16 "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 supplier 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 the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "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 supplier covered under the contract.
- 1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.

2. Application.

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1 The supplier shall not, without the purchaser'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 purchaser in connection therewith, to any person other than a person employed by the supplier 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.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights.

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) A bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) A cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or organization acting on behalf of the Department.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or 8 analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract .Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract,

including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1 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.

12. Transportation

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
 - (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 supplier of any warranty obligations under this contract; and
 - (e) Training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 13.2 Prices charged by the supplier 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 supplier for similar services.

14. Spare parts

- 14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
 - (a) Such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
 - (b) In the event of termination of production of the spare parts:

- (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
- (ii) Following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1 The supplier 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 supplier 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 supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- 15.2 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 SCC.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

- 18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

19. Assignment

- 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

- 20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled 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 goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

- 22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser 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 the delayed goods or unperformed

services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
- (a) If the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) If the Supplier fails to perform any other obligation(s) under the contract; or
 - (c) If the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
- 23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:
- (i) The name and address of the supplier and / or person restricted by the purchaser;
 - (ii) The date of commencement of the restriction
 - (iii) The period of restriction; and
 - (iv) The reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each

case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

- 24.1 When, after the date of bid, provisional payments are required, or antidumping 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 favourable 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.

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.

- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) The parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) The purchaser shall pay the supplier any monies due the supplier.
- 28. Limitation of liability**
- 28.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) The supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
 - (b) The aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
- 29. Governing language**
- 29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that exchanged by the parties shall also be written in English.
- 30. Applicable law**
- 30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
- 31. Notices**
- 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
- 31.2 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 of such notice.
- 32. Taxes and duties**
- 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department 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.

33. National Industrial Participation (NIP) Programme

- 33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation

34. Prohibition of Restrictive practices

- 34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.
- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

Js GCC (revised July 2010)

35. SPECIAL CONDITIONS OF CONTRACT

- 35.1 The State reserves the right to verify and authenticate all the information supplied in this document by the bidder.
- 35.2 The Bid must be strictly in accordance with the conditions and specifications contained herein.
- 35.3 If it is found that any information has been tampered with during the evaluation process and/or after the Bid/Contract has been awarded that any false information has been provided, the State reserves the right to take the necessary action as it deems fit, including but not limited to the institution of criminal proceedings.
- 35.4 Failure to sign all relevant places shall invalidate your bid (**SBD1, SBD 3.1, SBD 4, SBD 6.1 or 6.2, SBD 8, SBD 9 and SCC**)
- 35.5 All queries should be sent to the relevant person via email state above. No query will be responded to if sent 3 days before the closing date.
- 35.6 If you are not a registered supplier with the Department of Water and Sanitation, please complete the supplier registration forms and banking details, supplier registration forms are available at Departmental website, www.dwa.gov.za
- 35.7 Bidders/ Individuals that are directors or members in more than one company bidding for this tender and do not openly declare their interests will be disqualified
- 35.8 The DWS reserves the right to not make an award on any of the responses to this Bid.
- 35.9 The DWS reserves the right to award only parts of this bid and re-bid for other parts.
- 35.10 All bid documents should be hand delivered and deposited in to the Tender Box, if sent via post, Envelope or package, the envelope must be clearly marked to avoid your submission been mixed with normal letters sent to the Department.

35.11 Only signed, original documents will be accepted.

36. ACCEPTANCE OF TERMS AND SPECIAL CONDITIONS

The above terms of the bid and all Annexure have been read, understood and accepted.

For and on behalf of the Bidder:

.....

Signature of Bidder:

Date:

Bidder's Name & Surname:

Designation

Witness Name & Surname:

Date

Signature:

Address (Physical):



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

This template must be completed by the bidder

TENDER NUMBER		
SERVICE /PROJECT DESCRIPTION		
NAME OF BIDDER		
TENDER AMOUNT		
BBBEE LEVEL		
COMPANY'S COMPOSITION OF EXISTANCE		
	% OWNERSHIP	TOTAL NUMBER
WOMEN		
PEOPLE WITH DISABILITIES		
BLACK MALES		
YOUTH		
PARTICIPATION IN PROJECT IMPLEMENTATION		
	TOTAL NUMBER	LEVEL OF PARTICIPATION (eg Project Management, Technical, Administrative)
WOMEN		
PEOPLE WITH DISABILITIES		
BLACK MALES		
YOUTH		

Please note that this information is for reporting purposes only, and will not prejudice the company in anyway nor will it be considered as an evaluation tool.

Name:.....

Position:.....

Signature:.....Date:.....



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

DIRECTORATE: OPTIONS ANALYSIS

TERMS OF REFERENCE

for the

CROCODILE EAST WATER PROJECT: MODULE1: TECHNICAL FEASIBILITY STUDY

OCTOBER 2020

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LIST OF ACRONYMS AND ABBREVIATIONS

BBBEE	Broad Based Black Economic Empowerment
CAPEX	Capital Expenditure
CD	Chief Directorate
CPI	Consumer Price Index
CEWP	Crocodile River East Water Project
DBAC	Departmental Bid and Adjudication Committee
DEFF	Department of Environment, Forestry and Fisheries
DM	District Municipality
DTM	Digital Terrain Model
DWA	Department of Water Affairs (now DWS)
DWAF	Department of Water Affairs and Forestry (now DWS)
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMP	Environmental Management Plan
EWR	Environmental Water Requirements
FSL	Full Supply Level
GIS	Geographic Information System
GPS	Global Positioning System
H	Horizontal (distance related to slopes)
HDE	Historically Disadvantaged Enterprise
HDI	Historically Disadvantaged Individual
HFY	Historic Firm Yield
IAAP	Implementation Activities and Action Plan
ID	Infrastructure Development
IIMA	Interim IncoMaputo Agreement
ISP	Internal Strategic Perspective
IWAAS	Inkomati Water Availability Assessment Study
IWRP	Integrated Water Resources Planning
LM	Local Municipality
LSY	Long-term Stochastic Yield
MAP	Mean Annual Precipitation
MAR	Mean Annual Runoff

MLM	Mbombela Local Municipality
million m ³	Million cubic metres
MTEF	Medium-Term Expenditure Framework
NOC	Non-overspill Crest
NPV	Net Present Value
O&M	Operation and Maintenance
PFMA	Public Finances Management Act
PPPFA	Preferential Procurement Policy Framework Act (Act No. 5 of 2000)
PRIMA	Progressive Realisation of the IncoMaputo Agreement
PSC	Project Steering Committee
PSP	Professional Services Provider
PSR	Project Summary Report
RCC	Roller Compacted Concrete
RID	Record of Implementation Decisions
RL	Reduced Level (in metres above sea level)
RMF	Regional Maximum Flood
ROD	Record of Decision
SARS	South African Revenue Service
SBD	Standard Bidding Document
SCM	Supply Chain Management
SEF	Safety Evaluation Flood
SMC	Study Management Committee
ToR	Terms of Reference
TPTC	Tripartite Technical Committee
URV	Unit Reference Value
V	Vertical (distance related to slopes)
VAPS	Vaal Augmentation Planning Study
WC/WDM	Water Conservation and Water Demand Management
WE	Water Ecosystems
WRPM	Water Resources Planning Model
WRSM	Water Resources Simulation Model
WRYM	Water Resources Yield Model
WSS	Water Supply System
WTW	Water Treatment Works
WWTW	Waste Water Treatment Works

1. INTRODUCTION

The water of the Crocodile River System in Mpumalanga has been fully allocated yet the water requirements, especially domestic water demands, continues to grow. The system is therefor under stress, and it cannot fully meet the environmental water requirements as well as the reliability/assurance of supply for both agricultural and municipal water uses, which are under threat. This situation will worsen in the short term if Water Conservation and Demand Management (WC/WDM) measures are not fully implemented. In the medium to long term, WC/WDM will not be sufficient to provide for the increase in domestic water requirement and the yield of the water resource will have to be increased by means of additional storage. Due to the long lead-time required developing new water resources (building dams), an additional dam in the Crocodile River Catchment has to be investigated without delay.

The Chief Directorate: Integrated Water Resource Planning (IWRP) has conducted a study titled: "Water Requirements and Availability Reconciliation Strategy for the Mbombela Municipal Area". The study was executed at a very detailed level of investigation. The results and recommendation are of high confidence. The Study was guided by a Steering Committee with membership from all major water sector role players in the area, and the recommendations communicated.

A number of interventions were recommended for both the short and long-term water requirements for the Mbombela Local Municipality (MLM). The strategy was developed in an integrated manner as such that whilst it was aimed at addressing the growing water demands within the target area, the water requirements within the source area were not ignored, and if the recommendations are followed through, they will have a positive regional impact.

Currently the MLM Water Supply System (WSS) gets most of its water from the Crocodile (East) and Sabie River Systems as well as a small percentage from ground water. Transfers of water into the MLM WSS from outside the catchment are not feasible given distance from all other sources, topographic challenges and availability of water in surrounding areas. Some water resource deficits will have to be met from within the sub-catchments, through more efficient use of the limited resources. This entails implementation of WC/WDM measures. Dam development options within the Crocodile Sub-catchment have been identified and evaluated taking into account, environmental considerations, incremental yield, cost and regional benefits.

This study will take the above-mentioned work forward. It is the objective of this feasibility study to finalize the planning for the above-mentioned dam/dams. The Crocodile (East) Water Project (CEWP)

will be done at a very detailed level so that it can be ready for implementation in the shortest possible time upon the conclusion of this study.

In order to expedite the planning process for the raw water part of the project, the feasibility study has been divided in two separate interactive and concurrently running modules:

- Module 1: Technical Feasibility Study, and
- Module 2: Environmental Impact Assessment

The Environmental Impact Assessment (EIA) for the CEWP will be done by a PSP to be separately appointed for Module 2: Environmental Impact Assessment.

The scope of this study (Module1) includes both a pre-feasibility (Phase 1) and feasibility (Phase 2) work for a regional solution for the Crocodile (East) River Catchment.

The Professional Services Provider (PSP) must provide the diverse skills and expertise required to undertake this assignment within the time constraints provided. The PSP must have a Study Leader (Professional Engineer) experienced in coordinating and managing a study of this nature and would form the main link between the client and the task team leaders.

The PSP will be appointed by the Department of Water and Sanitation (DWS) to carry out all the necessary work as described in the Scope of Services in section 3 and 4 below to facilitate the successful conclusion of the project. The Scope of Services will be the minimum requirements that the DWS will accept. The Terms of Reference (ToR) will form the core of the work that will be required to complete the contract.

The planning of the CEWP will be completed once the project is formally handed over to the Implementing Agency. It is estimated that the PSP's service will be required for a period of 30 months.

2. BACKGROUND

2.1. The Crocodile (East) River Catchment

The Crocodile (East) River Catchment is situated in the north-east of the country and forms part of the larger Incomati River Basin, which is a shared basin between Mozambique, South Africa and Swaziland. The Crocodile River's Catchment has a total surface area of 10 446 km² and is made up of four tertiary catchments, the Upper Crocodile (X21), Middle Crocodile (X22), Lower Crocodile (X24) and Kaap (X23). Important tributaries of the Crocodile River include the Kaap River, the Elands River in the Upper Crocodile, the Nels River and White River in the middle of the Crocodile River.

The Crocodile River's Catchment is rural in nature with agriculture being the main activity. The high rainfall escarpment catchments of the Upper and Middle Crocodile as well as Kaap Catchments have significant areas of commercial forestry. The Upper Crocodile is relatively undeveloped with small domestic and irrigation demands. The Middle Crocodile Catchment has large areas of controlled irrigation and urban demands in the MLM. The Kaap Catchment is dominated in the lower eastern part by significant areas of controlled irrigation. (Water is transferred into the Kaap River Catchment from the Lomati and Shiyalongubu Dams for urban users (Umjindi Local Municipality) and agricultural (Louw's Creek Irrigation Board)). The Lower Crocodile also has large areas of controlled irrigation and smaller urban/domestic demands for the Nkomazi Local Municipality.

Towns in the MLM's area of jurisdiction include Mbombela (Nelspruit), Hazyview, White River, Rocky Drift, Ngodwana, Matsulu, the Nsikazi Area, Elandshoek, Kanyamazana and Kaapsehoop. The MLM forms part of the bigger Ehlanzeni District Municipality (DM).

Water shortages are regularly being experienced by both the domestic and agricultural sectors in the Crocodile River East Catchment. Both public and commercial sectors have requested further development of additional yield through storage within the Crocodile River Catchment in order to address the shortages and support new developments. There is also pressure from neighboring Mozambique to ensure that the minimum cross-border flows are met.

The only major storage in the catchment is the Kweni Dam (formally known as Braam Raubenheimer Dam) in the upper Crocodile River Catchment, which is approximately 60 km west of Mbombela (Nelspruit) and 160 km west (run of river length) of South Africa's border with Mozambique Komatipoort. This dam, which have a storage capacity of 158,9 million m³, is far from the demand centers and therefor makes it difficult to regulate and manage water distribution to supply demands as required by the users. This results in high transmission losses and occasional under-supply of requirements to some users in especially the lower reaches, as well as the extremely important international commitment to Mozambique.

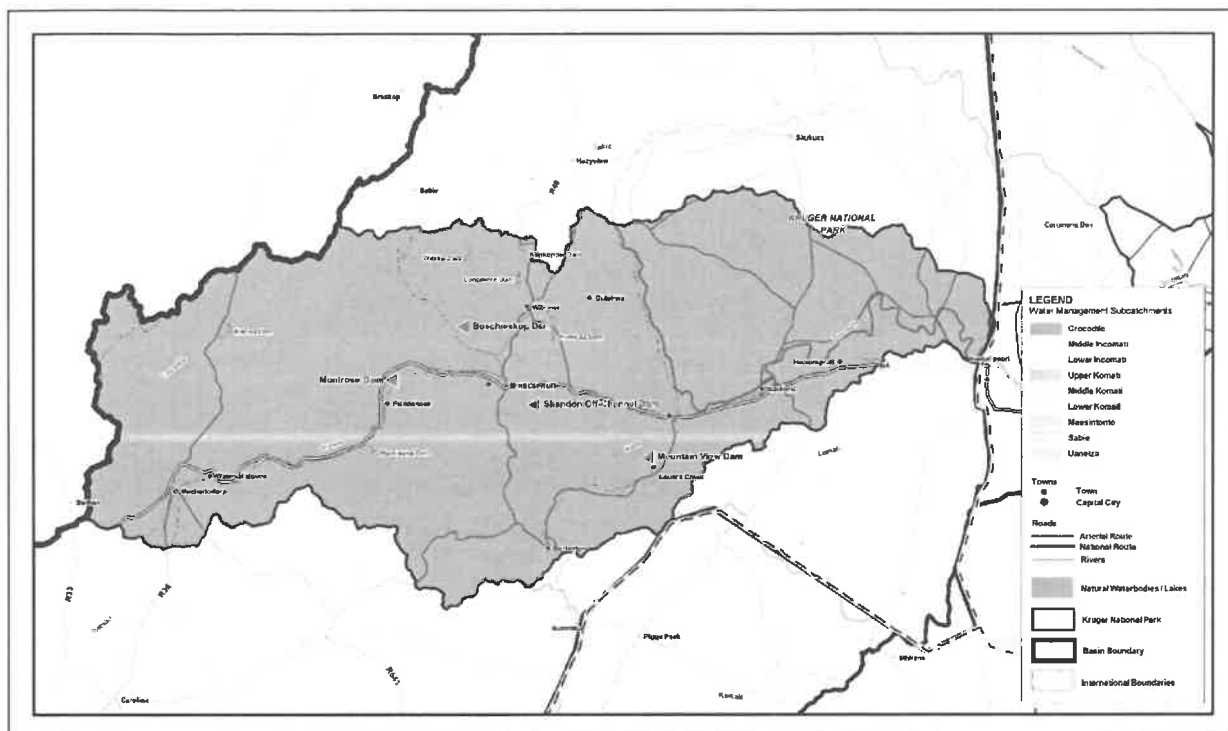


Figure 1: Schematic presentation of the Crocodile (East) System

2.2. Past and Current DWS Investigations

- Interim IncoMaputo Agreement (IIMA), Tripartite Technical Committee (TPTC) Mozambique, South Africa & Swaziland - August 2002.
- Inkomati Water Management Area Internal Strategic Perspective (ISP) PWMA 05/000/00/0303 – March 2004.
- Crocodile (East) River Development, Reconnaissance Study, P.D. Naidoo & Associates - September 2008.
- Inkomati Water Availability Assessment Study, Main Report (IWAAS) PWMA 05/X22/00/0808 – June 2009.
- Progressive Realisation of the IncoMaputo Agreement (PRIMA): Basin Management Alternatives and Feasibility Report: Part B: Inkomati River Basin, Report No.: Implementation Activities and Action Plan (IAAP) 3 – April 2011.
- Inkomati Water Management Area: Modelling Support for Licencing Scenarios: Identification of Dam Sites on Crocodile River (East) – (1st Draft 2011).
- Comprehensive Reserve Determination Study for Selected Water Resources (Rivers, Groundwater and Wetlands) in the Inkomati Water Management Area, Mpumalanga.

- Development of real-time operating rules for the Crocodile River Catchment.
- Water Requirements and Availability Reconciliation Strategy for the Mbombela Local Municipality – February 2014.
- Continuation of Water Requirements and Availability Reconciliation Strategy for the Mbombela Municipal Area – October 2020.

2.3. General Recommendations of the Previous Studies

- **Inkomati Water Availability Assessment Study (IWAAS)**

The reservoir balances and flows in the White River Catchment are seriously flawed and require attention to improve confidence in the flow information in this catchment.

- **Inkomati Water Availability Assessment Study (IWAAS)**

It is recommended that the Water Resources Planning Model (WRPM) be set up to model the system in a manner to match the actual operation of the system.

- **Crocodile (East) River Development, Reconnaissance Study (2008)**

Although the report recommended seven sites to be investigated potential of only two dams listed below be evaluated through pre-feasibility followed by a feasibility study for the preferred dam. The two dams, namely Mountain View Dam on the Kaap River and Montrose Dam on the Crocodile (East) River were identified as the best options, to be taken forward.

- **Inkomati Water Management Area: Modeling Support for Licensing Scenarios (1st Draft 2011)**

The study has concluded that only two dams, namely Montrose and Mountain View have the potential yield to meet the regional needs.

- **Comprehensive Reserve Determination Study for Selected Water Resources (Rivers, Groundwater and Wetlands) in the Inkomati Water Management Area, Mpumalanga**

Bio-monitoring should start immediately so that some of the questions that will arise from future studies (such as this) can be addressed.

- **Water Requirements and Availability Reconciliation Strategy for the Mbombela Local Municipality (2015)**

Three (3) dam sites on the Crocodile River have been recommended for further detailed investigations. These are Boschjeskop Dam on the Nels River, the Mountain View Dam on the Kaap River and Strathmore Dam, an off channel storage near the confluence of the Kaap and Crocodile Rivers. Mountain View Dam or Strathmore Dam could make more than

50 million m³/a of additional water available (after meeting the Ecological Reserve); these dams have been identified as the best options to investigate in a feasibility study.

2.4. Dams Recommended by the Crocodile River (East) Development: Reconnaissance Studies:

Mountain View Dam: The proposed dam is located near the end of a steeply sided valley on the Kaap River, some 10km upstream of the confluence with the Crocodile River. A 74,0 to 100,0 m high Roller Compacted Concrete (RCC) arch dam with a central uncontrolled spillway provided with Robert's Splitters, discharging into a tail pond is proposed. The dam is proposed to have a storage capacity of between 147,4 and 376,9 million m³ (0,8 – 2,0 MAR). Site co-ordinates are 25°36'45" Latitude and 31°16'15" Longitude.

Strathmore Off-Channel Dam: The proposed site for this off-channel storage dam is located on the southern side of the N4 national highway halfway between Kaapmuiden and Malelane. It is to be constructed in a range of hills aligned more-or less east-west and parallel to the N4 and would require the construction of at least two separate dam walls. The absence of visible outcrop at the westernmost site implies an embankment dam is best suited. If a dam in excess of 35 m high was to be constructed, a third opening in the range of hills would be affected and a third dam wall will be necessary. The Dam will be between 32 to 42 m high. The storage capacity varies between 59,1 and 113,8 million m³. Site co-ordinates are 25°36'45" Latitude and 31°16'15" Longitude (second wall co-ordinates are 25°32'07" Latitude and 31°25'31" Longitude).

Boschieskop Dam: The potential dam site is located some 16km to the north west of Nelspruit. Access to the dam is from the surfaced road between Rosehaugh and White River, from which a farm road branches to the south to provide access to the left flank of the possible dam site. It was proposed that an embankment be constructed on this side of the valley. Similarly, and within the confiners of the valley itself, a central RCC spillway section. The Dam will be between 40 to 45 m high. The storage capacity varies between 75,6 and 101,0 million m³ (0,8 – 1.1 MAR). Site co-ordinates are 25°21'07" Latitude and 30°52'51" Longitude.

Montrose Dam: The possible dam site is located on the Crocodile River some 2km downstream of the confluence of the Elands and Crocodile Rivers. Taking into account the deep soils on the right flank, the Montrose Dam is conceived as a clay cored rock fill/RCC gravity composite structure with a wall height of 87,9 to 101,6 m. The storage capacity varies between 181,3 and 326,2 million m³ (0,5 – 0,9 MAR). Site co-ordinates are 25°27'17" Latitude and 30°43'34" Longitude.

2.5. Purpose of the Technical Feasibility Study

It will be required from the PSP to do a technical feasibility study that will propose a scheme and scheme lay out that will be technical according to best practices, financial viable, socio-economical acceptable and environmentally without fatal flaws.

3. PHASE 1 (PRE-FEASIBILITY): SCOPE OF SERVICES

3.1. Inception

It will be required from the appointed PSP to do thorough research and review of all the studies as well as all the available information. It will be required to liaise with all the relevant organizations and role-players in preparation for the feasibility study. It will be necessary to update and maintain a list of such studies and their relevance to this assignment.

Compile an Inception Report that will consist of a detailed description of tasks, a study programme and budget in terms of the criteria that is set out in **Section 5**. The Inception Report will form part of the Contract and stipulate the scope of work for the study, the Contract Amount and the Contract Period which, upon signing of the Contract by both parties, allows the PSP to start with their work.

The purpose of an Inception Report is to capture important work that would be necessary for the successful completion of the study, which may for some reason or another have been overlooked in the compilation of the original Study ToR or the proposal submitted by the PSP. Omission of this additional work is usually only detected once work on the study has started and most of the team members have had time to familiarize themselves with the detailed requirements of the tasks necessary to ensure the successful completion of the study.

The Inception Report is a formal document that will cover all the aspects of the original proposal plus the additions to the scope of work, Contract Amount and Contract Period that may be required. The Inception Report will list all tasks required, all the team members for each task and their time allocation as well as their hourly rates per task, anticipated disbursements, revised study programme, etc. The rates of all new team members need to be approved before they can be engaged. The Inception Report can therefore be considered a revised Technical and Financial Proposal.

For this particular appointment the Inception Report should be finalized (co-signed by the Client and PSP) within three (3) months of commencement of the study.

3.2. Scheme Configuration

It will be required from the PSP to propose a scheme configuration from a strategic water resource perspective that will lead to a long-term solution for the region and the MLM.

The scheme configuration could consist of the proposed Montrose Dam or the proposed Mountain View Dam or the proposed Strathmore Dam plus/or the proposed Boschjeskop Dam. However, it is anticipated that the construction of one dam should suffice.

The proposed Montrose Dam on the Crocodile (East) River as an option, needs to be reviewed to confirm findings (the discarding of this dam as option) made, were correct. It will be required from the appointed PSP to compile a proper write-up, for the reasons, this dam was discarded as an option.

The two best options/scheme configurations identified will need to be investigated at pre-feasibility level (Phase 1) where after the Feasibility Study (Phase 2) will commence for the best option identified.

3.3. Pre-feasibility Study

It will be required from the appointed PSP to undertake a Pre-Feasibility Study for the two dams, associated infrastructures and to recommend one dam/scheme configuration to proceed with a Feasibility Study that should include, but are not limited to:

- Environmental assessment of the two proposed options;
- The Comprehensive Reserve Determination Study was completed during 2010 and it included some broad evaluations of the proposed dams. However, due to the lack of specific information regarding the dam position and size, a detailed evaluation of the ecological consequences could not be undertaken. As a contribution to the impact assessment as well as to comply with the National Water Act (Act 36 of 1998) the ecological consequences on the recommended Ecological Category should be evaluated for all options to provide the required information when determining the management classes. This evaluation should be undertaken using the DWS or recommended tools. To ensure consistency with the Ecological Reserve results, the model setups, which were used to determine the Present Ecological State and to evaluate operational scenarios, must be used. These models are available from Chief Directorate: Water Ecosystems (CD: WE) as part of the electronic report which includes models and raw data from the Comprehensive Ecological Reserve Study. The evaluation must be undertaken using the existing Environmental Water Requirements (EWR) Sites downstream of the proposed dams. Additional to the above, a preliminary analysis should be undertaken of which floods or portion of the recommended EWR floods should be released from both dams. This will be required to

determine available yield from the dams and therefore plays a vital role in the decision-making process regarding the two options.

- Perform a historic yield analysis/review using the existing hydrology in order to determine a yield versus full supply capacity relationship.
- Survey (topographic) and aerial photography – MLM information available for Montrose Dam (PSP to obtain Lidar survey and Digital Terrain Model (DTM));
- Perform/review preliminary (pre-feasibility) geotechnical and material investigation for the dams;
- An evaluation of the pros and cons of the various options, taking into account the output of the Reserve and the National Water Resources Classification System as well as the impact of these dams on the Ecological Category and the Management Class;
- Identify fatal flaws in terms of costing, environment, social, heritage and geology relating to the proposed dams, and
- Recommend a possible regional water supply configuration i.e. one possible dam to proceed with in a feasibility study. The dam should be addressing water storage in the regional context.
- The above should be informed by an engineering economic analysis (Unit Reference Value/Cost Benefit Analysis)
- Environmental scrutiny to determine possible fatal flaws of possible options

4. PHASE 2 (FEASIBILITY LEVEL): SCOPE OF SERVICES

4.1. Environmental Screening

It will be required from the PSP for the purposes of this module to do a complete environmental screening in order to update the pre-feasibility information. The Environmental Impact Assessment (EIA) Study will be conducted as a separate study and it will be awarded to an independent consultant. Work performed by the PSP during the screening process will ensure a smooth handing over and the fast tracking of the EIA Process. The PSP will be required to assist the DWS Project Manager with reviewing of work done by the PSP appointed for the EIA, i.e. the Environment Assessment Practitioner (EAP). The PSP will be required to assist with project management of the EIA Study. The screening output will be used by the EAP for the EIA Process. The EIA Consultant and Environmental Assessment Practitioner (EAP) will be appointed about three (3) months after the appointment of the PSP for the technical study.

4.2. Project Management

4.2.1. Project Coordination

Bidders must propose the amount of meetings required for coordination in order to complete the study successfully. It is foreseen that most meetings will take place in the region that will benefit the CEWP.

The appointed PSP must set up structures/committees especially for coordination of modules that will address specific issues. Some of the structures will deal with contract administration, but some of these structures will be of a technical nature and will coordinate National, Provincial, and Regional Government with implementers and other PSPs.

The following are examples of items that will be discussed in Nelspruit:

- Budget and cash flows;
- Study (module) progress;
- Variation Orders;
- Matters arising;
- Way forward, and
- Recording of decisions.

Technical steering/coordination will be done in conjunction with the technical meetings. It is foreseen that the technical meetings for Modules 1 and 2 will be dealt with over one (1) or two (2) consecutive days. These meetings will be held in Nelspruit.

Typical items that will be addressed at the technical meetings include, but are not limited to:

- Financing;
- Institutional;
- Technical;
- Legal;
- Environmental;
- Integration, and
- Programme.

Typical support services with regard to meetings will, amongst others, comprise of:

- Compiling of agendas;

- Setting of meeting dates – will require co-ordination and effort to ensure that critical members are indeed available to attend the meeting;
- Contacting relevant parties to attend meetings, including reminders, by letter, e-mail, fax and telephone;
- Preparation of Microsoft PowerPoint presentations;
- Keeping and distributing minutes;
- Site visits;
- Recording of decisions;
- Arrange venues, and
- Other meeting logistics.

The appointed PSP will be required to identify the need, and appropriate dates, for public and other ad hoc meetings between parties relevant to each particular task of the programme to ensure that programme targets are met. The PSP must arrange, and timeously convene such meetings through the DWS Project Manager and provide support services to the DWS Project Manager in this respect. It is anticipated that there will be 15 to 25 meetings required to complete the feasibility study. The number of meetings that may be required over the contract period cannot be accurately predicted at this point and neither can the frequency, or duration, thereof be predicted at this stage. It is anticipated that certain meetings will only be necessary at the end of the feasibility stage.

Note: *“The EIA Process will cater for its own public participation process and the administration thereof”.*

Typically meetings can be held for the following reasons:

- Monthly progress meetings with regards to project implementation;
- To resolve issues concerning project funding which will require interaction with the funding agent;
- To resolve issues on institutional matters;
- To resolve technical issues;
- Deliver presentations;
- Working meetings with DEFF with regard to obtaining project authorization;
- Meetings related to land acquisition in terms of environmental issues, and

- Meetings regarding the implementation of the proposed environmental impact mitigation measures and programmes.

The appointed PSP will be required to report on any issue that may arise and for which solutions and/or decisions are sought. They will be required pursue the matter until the issue is resolved.

It is expected that at least twenty five (25) reports will be drafted during the cycle of the contract. It is the experience of the DWS that the average page length of these reports is about 30 pages. The issues may be of a diverse nature, i.e.:

- Technical, for example reporting on the need for Bridging Studies or rejecting them;
- Social;
- DWS and other policies;
- Legal;
- Institutional;
- Environmental;
- Financial (e.g. budgets, funding, water tariff, etc.) etc.

The appointed PSP will be required to develop, or improve on, templates for reports that will be used for the project. The templates will ensure the standardizing of fonts, borders, spacing etc. and **automating** the table of content, indexes, references, tables, figures, captions etc.

Further, the PSP will be required to maintain regular liaison between all parties involved in the implementation process and facilitate interaction between the parties and the stakeholders.

The appointed PSP will be responsible for Public Relations, therefore a person specializing in this field must be part of the team. It is the experience of the DWS that this task will gain momentum and peak during the final stages of the project.

The appointed PSP will be required to execute ad hoc tasks as requested. These tasks can be defined as actions required for project management, coordination and the facilitation during the execution of both the DWS modules including the technical study for the potable water. These tasks will include, but not be limited to, the following:

- Official handing over of the project from the DWS Chief Directorate: Integrated Water Resource Planning (CD: IWRP) to the DWS Chief Directorate: Infrastructure Development (CD: ID), i.e. from planning to implementation;

- Do technical reviews of reports for Module 2;
- Develop and give presentations when required. It may often happen that these presentations must be developed on short notice. Bidders should realize that it will be required from their team members to work overtime when necessary;
- Write letters;
- Review and comment on drafted letters;
- Represent the Client on request, as well as
- Develop and update Capital Expenditure (CAPEX)

4.2.2. Project Planning & Monitoring

Project management tools and software such as Microsoft Project must be used to ensure that sub-tasks such as the following can be done:

- The Project Coordinator shall produce a detailed tasks list with all the activities required, detailed programme identifying the critical path and responsibilities of the different parties to complete the project in the timeframe, detailed scope of work for each study (Modules 1 and 2) of the project and the deliverables;
- Identify critical milestones to be adhered to in order to achieve the implementation programme;
- Supply early warning to start tasks and sub-tasks;
- Develop a work breakdown structure to achieve the objectives for the technical feasibility for the project;
- Notify when tasks and sub-tasks should be completed, and
- The project management software used must be internet enabled to facilitate in-time monitoring by the Client.

4.2.3. Information Management

The appointed PSP must develop an information management plan so that the following will be possible:

- Keep track of decisions made during the implementation process, i.e. keep a record of decisions;
- Develop an electronic data base so that it will be easy to track, sort and query e-mails, letters and reports by using programmes for example SharePoint or Microsoft Access;

- Keep the DWS Project Manager, the DWS Management and the public informed on progress of the project and compile and submit regular progress and financial reports for the project;
- Populate the DWS Webpage with CEWP project information in order to achieve successful dissemination of information, and
- Collect published information relating directly to project, or that might influence the project - for example water resource articles published in the news media.

The successful bidder's personnel who will be working on the project will be required to sign confidentiality clauses so that information, not meant for public domain, will be protected.

4.2.4. Risk Assessment

The following risk assessment tasks will be required:

- Assessment of risks and mitigation strategies over the life of the project;
- Advise on an appropriate risk management strategy for the following potential categories: political, technical, environmental, social, legal, demand/supply of water, operational, institutional, financial and other identified issues;
- Develop a risk rating mechanism to determine the probability of occurrence of the potential risks and estimation of their impact, as well as
- Ensure stakeholder participation in the risk management process.

4.3. Water Resources

4.3.1. Determine Existing and Future Water Demands

All the current and future water demands, up to the year 2045, must be updated. This must include an independent review of the demographic study undertaken as part of the Mbombela Reconciliation Strategy Study. Growth projections should be considered best on at least three (3) scenarios (best practice, municipal projections and current consumption behavior). In consultation with the client and stakeholders, the old and new users to be supplied from the new dam/dams need to be identified.

4.3.2. Yield Analyses with the Water Resources Yield Model

Various yield analyses performed with the Water Resources Yield Model (WRYM), other than that required for the Ecological Reserve, will be required. The following subtasks are foreseen but there is likely that further tasks may be identified during the course of the study.

4.3.2.1. Configuration and testing of a network (system yield) for the WRYM

Review the WRYM for the entire Crocodile Catchment that would support water availability assessments at a level that was recently carried out for the Mhlathuze, Inkomati and Olifants Rivers Catchments. The resolution sought will require that all existing and future points of abstraction, return flows and storage within the catchment will be incorporated in network. Compilation of the WRYM schematic diagram representing the system network is important and must be included as part of the deliverables.

Review operating rules: The operating rules must take into account all the technical data and analysis developed for the study. The operating rules must be recorded in a report.

Extensive testing must be undertaken to ensure that the model has been configured correctly and appropriately represents the system.

4.3.2.2. Compilation of Storage-yield Curves

In order to size the dam/dams it will be necessary to compile storage-yield curves for each dam. These curves will then be transformed into yield-cost curves, etc. The area-capacity and other related information of the various dam sites will form part of the Engineering Task.

The yield analyses shall take cognizance of all current water requirements that influence the yield of the CEWP.

The yields utilized for compiling storage-yield curves will be limited to Historical Firm Yields (HFYs). Yields will be calculated on the live storage volumes of dams as estimated in the Engineering Task, i.e. dead water storage will not be included in yield calculations.

4.3.2.3. Compilation of a User Priority Classification Table for the Water Users of the Crocodile (East) System

Compile a user priority classification table for all water users of water resources (the Crocodile (East) Catchment) through a process of stakeholder involvement. The table shall reflect all the types of users encountered and categorized into different user sectors. Where necessary, user sectors will be subdivided in sub-categories. Typical categories (user sectors) would, for example be urban domestic; rural domestic; urban industrial; water intensive industry (e.g. Sappi); mining; and irrigation. The likelihood exists that the irrigation sector may require further sub-divisions to reflect and suit particular agricultural activities.

4.3.2.4. Determine Historical Firm Yields (HFYs) of the CEWP

HFY analyses shall be carried out for the dam/dams. The yields shall be determined for the final live storage/s selected for the dam/s. Thus the HFY, so assessed, would be considered the final HFYs of the CEWP. The refined resolution network of the WRYM will be used to determine HFYs.

The HFYs shall be calculated for the in-basin demands of the Crocodile (East) Catchment at 2020, 2030 and 2040 development levels. These dates are based on the current assumption that the CEWP will only become operational in either 2028 and may be changed by the Client during the course of the study. The appointed PSP will therefore have to confirm the final dates to be adopted with the Client during the study.

In order to establish the sensitivity of the Environmental Reserve with regards to the yields of the CEWP, HFYs shall be determined for two different cases viz (1) Case 1: Full compliance with the Reserve, and (2) Case 2: No releases for the Ecological Reserve.

Additionally, as part of the HFY analysis, a preliminary assessment of system operating rules must be undertaken based on scenario analysis methodology with the aim of selecting the most appropriate operating rule that can be used in the assessment of long term stochastic yields.

4.3.2.5. Determine Long-term Stochastic Yields of the Crocodile (East) Water Project

Long-term Stochastic Yield (LSY) analyses must be undertaken for the final proposed scheme. As in the case of HFYs, the LSYs shall be determined for the final live storages selected for the dam/dams. Thus, the LSY so assessed will be considered to be the final LSYs of the CEWP. The refined resolution network of the WRYM will be used to determine LSYs.

LSYs shall be calculated for the Medium Growth in-basin demands of the Crocodile Catchment at 2020, 2030 and 2040 development levels. As in the case of the HFY determinations, the appointed PSP will have to confirm the final dates to be adopted with the Client during the course of the study.

LSYs will be recorded in the report for the following assurances of supply: 75.0%, 90%, 95.0%, 98.0%, 99.0% and 99.5%.

4.3.3. Future Water Balance for the Project

The LSY results and the determined water demands must be used to project annual water balances from 2020 to 2030 in order to get a preliminary indication of when augmentation of CEWP will be required.

4.3.4. Development of Short-term Stochastic Yield Reliability Curves

Short-term yield analyses must be conducted for the first phase of the CEWP and short-term yield reliability curves developed for each decision month as required by system water users. These curves will be used for conducting analyses with the Water Resources Planning Model (WRPM).

4.3.5. Water Resources Planning Model

The WRPM must be configured, tested and applied with the purpose of:

- Deriving final system operating rules;
- Deriving drought curtailment rules, and
- Determining the timing of the next augmentation scheme.

4.3.5.1 Configuration and Testing of the WRPM

A network for the WRPM must be configured based on the network developed for the WRYM of the Crocodile (East) Catchment in Water Resources Task and linked to the latest update of the WRPM network of the Crocodile (East) System. The final WRPM schematic diagram representing the network with penalty structures must be compiled and included as part of the deliverable of this module.

In configuring the WRPM, the model shall use the user priority classification tables applicable for each part of the Crocodile (East) System.

Practical decision dates for WRPM analyses will be proposed by the appointed PSP.

Before proceeding with any analyses, the WRPM configuration must be thoroughly tested to ensure that all aspects are functioning correctly and that the intended system operation is indeed simulating the model correctly.

An electronic copy of the final WRPM for the Crocodile (East) System, supported by the associated report, must be submitted to both the DWS in the format required by the DWS. Electronic copies of scenario runs with the WRPM must also be made available to the DWS.

4.3.5.2 Recording the Final Operating Rules Recommended for the CEWP

This task comprises a write-up in the report of the final operating rules recommended for the various phases of the CEWP.

4.3.6. Assessment of the Potential for Hydropower Generation at the Dams (Water Resources)

The purpose of this task is to assess the potential of the CEWP to develop hydropower at the dam/dams. Power so developed would be either utilized to power project pumping stations or made available to the national grid.

In order to obtain conservative results all analyses will be performed using the medium demand scenario.

The first deliverable of this task will be to produce time-series of flow releases and associated lake water levels of the dams for the historical inflow sequence. This has to be performed for three (3) different future demand horizons, e.g. 2020, 2030 and 2040. These dates are not fixed and will be finalized through discussion with the Client during the course of the investigation when more information will be available.

The monthly flow releases, so obtained, must be converted into daily flow releases that take account of the hydrographs required for both the Reserve and other downstream users. These calculations would typically be performed through the use of spreadsheets. The method and assumptions used for the conversion of monthly flows into daily flows must be well described in the report. The results must be presented in both tables and graphs.

The second deliverable would be to provide the above results to the Engineering Study Team in order to determine the characteristics of a typical hydropower plant that would suit the determined release data. These characteristics will then be used in the WRYM to assess the hydropower potential of each dam, at each specific planning horizon. The results of this task, typically energy and power duration curves for each month of the year and all the months combined (total) must be provided in the form of graphs and tables.

The above results must be submitted to the Engineering Study Team who will then have to assess the economic viability of the CEWP's potential for the generation of hydropower.

4.4. Ecological Reserve and Classification

To ensure consistency with the Ecological Reserve results, the model setups, which were used to determine the Present Ecological State and to evaluate operational scenarios, must be used. The evaluation must be undertaken using the existing EWR sites downstream of the selected scheme. Additional to the above, an analysis should be undertaken of which floods or portion of the recommended EWR floods should be released.

Additional operational scenarios developed for a study that was not captured during the reserve and classification process should be identified in order to update the models as part of the review process.

For the above-mentioned work all bidders will be provided with an approved Provisional Sum so that a subcontractor can be appointed to complete this task (refer **Section 6** below). When appointing a subcontractor the PFMA and other Government Procurement Guidelines will need to be followed.

4.5. Engineering Investigation

4.5.1. Dam Position

The appointed PSP will be required to revisit the position of the proposed site/s for the proposed dam/dams. It is a possibility that the centerline might need to deviate from the centerline proposed in the pre-feasibility study. It will most likely not be necessary to move it more than 100 metres.

4.5.2. Materials Investigation

The main focus of the materials investigation will be to identify suitable sources of material for the dam construction. This investigation must be carried out by an experienced team supervised by a dam design engineer with experience in a variety of types of large dams (typically Categories 2 and 3 dams). Quarry sites must be identified and assessed by an engineering geologist with proven experience in dam construction and it is recommended that the engineering geologist responsible for the geotechnical investigation also be used for this task.

Suitable material would be material of acceptable quality and quantity found as close as possible to the dam sites, preferably within the dam basin. The quality of material will have to be proven by laboratory testing in accordance with international standards for dam construction.

In the Financial Proposal of the PSP, the PSP shall only price for the professional time of the professional team member(s) responsible for the procurement of reputable service providers to conduct the physical investigations, supervision of these investigations and reporting on the findings of the investigations.

Additionally to the bid price for the above mentioned work an approved Provisional Sum for materials investigation will be provided to appoint a subcontractor (refer **Section 6** below).

When Sub-Contractors are appointed Government Procurement Guidelines (for example the PFMA) will be adhered to.

It will be required to setup a Geographical Information System (GIS) (surveyed with a sub-meter GPS) and material sources should be indicated on a map which will, not only indicate their aerial extent, but also the haulage distances to the dam site.

The material investigations to be conducted for the various scheme components will entail the following (bidders must submit requirements for a feasibility study):

- Borrow areas for embankment soils;
- Borrow areas for sand, as well as
- Quarries for concrete aggregate, rockfill and rip-rap.

4.5.3. Geomorphologic and Seismic Investigation

It is foreseen that this task will be led by a qualified geomorphologist with a proven experience in this type of investigation. It will be required to identify active faults within 10 km of dam sites and on the route of the conveyance system.

A seismic study must be undertaken at the proposed dam site, and cognizance taken of the results during the feasibility design component of this study.

4.5.4. Geotechnical Investigations

This task is aimed at obtaining detailed feasibility level information on the foundation conditions for all the project infrastructure. In addition, this task will also assess the stability of the dam basin slopes. A qualified engineering geologist with proven experience in dam construction should execute this task.

In the Financial Proposal, the PSP shall only price for the professional time of the professional team member(s) responsible for the procurement of reputable service providers to conduct the physical investigations, supervision of these investigations and reporting on the findings of the investigations.

Additionally to the bid price for the above-mentioned work an approved Provisional Sum for geotechnical investigation will be provided to appoint a subcontractor (refer **Section 6** below).

When Sub-Contractors are appointed Government Procurement Guidelines (for example the PFMA) will be adhered to.

It will be required to setup a GIS (surveyed with a sub-meter GPS) to log geotechnical investigations.

The geotechnical investigations to be conducted for the various scheme components will entail the following:

4.5.4.1 Dam Foundations

These investigations will typically involve amongst others core drilling; pit and trench excavations, in situ permeability tests, grout-take tests, petrographic analysis of rock, compressive strength of rock cores, fault description and quantification, weathering resistance of rock, etc. i.e. all the typical parameters required for designing a dam on the particular site. The results of the investigations will be used to predict as accurately as possible excavation depths for both concrete and embankment dam walls.

4.5.4.2 Slopes of the Dam Basin

This investigation will be limited to the basin of the selected dam where potentially critical slopes will be identified. The investigation on critical slopes will typically entail the following: determination of overburden depth by means of test pits and trenches or core drilling; assessment of overburden material properties in both the dry and submerged states; assessment of rock strata joint orientation and joint fill material; etc. These investigations will be concluded with stability analyses where required with suitable recommendations on potential methods for slope stabilization.

4.5.5. Conveyance System

Preliminary geotechnical work might be required to optimize a conveyance system for Strathmore Dam. If this dam is the most feasible option, a detailed geotechnical investigation must be undertaken so that feasibility for the conveyance system can be proven.

4.5.6. Survey

The appointed PSP will be required to do all surveys necessary for the feasibility design for the project. Bidders must propose and cost for each component of the scheme and provide detail of the survey that will be required.

4.5.7. Dam Type Selection

An alternative position can necessitate a review of the dam type proposed. An alternative proposal must be based on technical, financial and environmental reasons. Nevertheless, it is required that the proposed dam type be reviewed it at feasibility level by comparing dam types. Proper discussion in this regard will be required.

4.5.8. Establish Required Storage Capacity for the Dam

In planning, a dam one of the major objectives is to keep the cost of water (water tariff) affordable to the water users.

Area-capacity curves are required to be determined for various dam sizes. Further, working closely with the Water Resources Study Team, the yield-cost curves for the dam/dams must be compiled. Comparison of the Unit Reference Values (URVs) of the various scenarios would indicate the best scenario from an engineering/yield economic perspective.

Any environmental concerns, determined by the EAP as part of the EIA Process, that could have an impact of the sizing of recommended dam must be taken into consideration after joint consultation with the Client and the EAP.

There may, however, also be other considerations that could influence the final size selected and the PSP would have to bring this to the attention of the Client during the Inception Phase of the study (Inception Report).

4.5.9. Flood & Backwater Calculations for the Final Dam

This task would require the services of a hydraulic engineer with proven experience in Flood Hydrology & backwater calculations.

The appointed PSP will do flood determinations for the recommended dam.

Determination of the dam's backwater curve under high flood conditions (1:100 year flood) would essentially establish the purchase line for the dam. The backwater for the dam will consider the impact of 50-years of sediment deposition in the dam basin and will assume that the dam would be full when the high flood occurs, thus when the 1:100 year flood flows into the dam.

4.5.10. Climatological Data for the Construction Site

As it is anticipated that the project will be implemented shortly after completion of the feasibility study and there will be very little time, if any, to gather detailed climatological information for the construction site. As a precautionary step, it has therefore been decided that the gathering of climatological information for the construction site should be a task for this study.

4.5.11. Water Quality and Limnology

The water quality and limnology according to best practices is to be undertaken by the PSP. Technical outputs of these assessments must be incorporated into the feasibility designs for the scheme.

4.5.12. Sediment Yield

The PSP must do a sediment yield assessment (50-year deposition) for the proposed dam/s. The sediment deposition in all dam basins need to be modelled, since the deposited sediment will influence the backwater levels especially in the upper reaches of the dam basins.

This task would require the services of a hydraulic engineer, or an appropriate professional, with proven experience in sediment yield assessments and the modelling of sediment deposition in dam basins.

4.5.13. Land Requirements and Associated Costs

The PSP will be required to determine the purchase/expropriation line around all scheme infrastructure and to establish the extent of any servitudes required. Standard DWS requirements must be adhered to in this regard.

Working in close liaison with the EAP, the appointed PSP will be required to establish the names and contact details of affected landowners and the relevant cadastral details relating to the infrastructure, impoundment area and pipeline routes.

The services of an experience land evaluator must be utilized to obtain an accurate cost for the land purchase and servitude registration required for this project. These costs are to be incorporated into the cost model. All information obtained must be suitably documented in the final reports.

4.5.14. Optimize Scheme Configuration

The optimum scheme will be the combination of the optimum scheme components. In establishing the optimum scheme configuration URV calculations will be similar to the procedure used for the dams. Water sales will commence at the same date assumed for the particular dam type. O&M costs will be estimated in accordance with recommendations made in the ***Vaal Augmentation Planning Study: Guidelines for the Preliminary Sizing, Costing and Engineering Economic Evaluation of Planning Options*** (VAPS) (DWS, 1996).

The appointed PSP will assess operational requirements (gauging weirs, telemetry etc.) for the scheme in this task.

4.5.15. Assessment of the Potential for Hydropower Generation at the Dams (Engineering Investigation)

The purpose of this task is to assess the potential of the CEWP to develop hydropower. The power developed would be either utilized to power project pumping stations or made available to the national grid.

The Engineering Study Team is required to work together with the Water Resources Study Team in order to complete the deliverable required for this task.

The characteristics of a typical hydropower plant best suited to the water releases data from the Water Resource Study must be determined. An assessment must be conducted on the economic viability to develop a hydropower capability at the dam/dams. The results are to be discussed with the Client to get a decision on whether to include hydropower further into the feasibility study. All results must be well documented in the final reports.

4.5.16. Feasibility Design of the Selected Scheme

The feasibility design of the selected (optimum) scheme must be done at a very detailed level in order to facilitate a smooth and quick tender design phase during the implementation phase. The objective will be to expedite the implementation programme. Specialist input will be required for this work. In order to achieve this objective, a feasibility study design report must be prepared by the PSP at least addressing, but not limited to, the following:

- Spillway;
- Embankment;
- Outlet works;
- Intake works;
- Diversion during construction;
- Operation and maintenance;
- Pipeline or alternative;
- Pump station;
- Electricity requirements;
- Access roads, and
- Realignment of services.

4.5.17. Costing of the Project

This task shall be performed by a specialist estimator who has both a proven record and experience in estimating construction costs and is still employed in the field. The task requires that a very accurate cost model be set up for all the listed items in the bill of quantities for the project. The design engineers for the project will therefore have to assist the estimator in identifying most of the billing items that would be encountered in the study. Typical billing items for the project will be found in the DWS's Vaal

Augmentation Planning Study: Guidelines for the Preliminary Sizing, Costing and Engineering Economic Evaluation of Planning Options (VAPS) (DWS, 1996). Costs for items that will make up 80% of the project construction costs, e.g. excavation, fill material, concrete, etc., should be developed from first principles considering the costs of labour, plant, material, energy and transport (hauling). The remaining items having a minor impact on the overall cost of the project may be estimated by other means. Rates determined shall not include contingencies.

4.6. Implementation Actions

4.6.1. Timing and Implementation Programme of the Project

This task involves determining the date that the project needs to be commissioned taking into consideration the current water use projections as well as the actual time required to implement the project.

The timing of the project from a water resources perspective will be determined by means of analysis performed with the WRPM. This analysis will be conducted as part of the system analysis task. However, the date so obtained may have to be adjusted as a result of practical constraints with regards to lead times and the actual construction time required.

Hence, this task would mostly entail determining the required implementation programme for the project comprising the following programme components:

- Tender design;
- Detail design (will follow on tender design and carry on during construction);
- Letting of tenders;
- Adjudication and award of contract, as well as
- Actual construction.

The PSP is expected to provide a very detailed programme in the form of Microsoft Project, or any other similar software acceptable to the Client.

4.6.2. Project Summary Report

The Project Summary Report (PSR) will not only cover technical aspects, but also environmental and other aspects dealt outside of the feasibility study. Information on some of these aspects may only become available after the feasibility study and therefore PSP will essentially produce a preliminary PSR which may, or may not, have to be updated at a later stage.

The PSR will be drafted in the same manner as former White Papers of the DWS. This would best suit its publication in both the Government Gazette and on the DWS and Project Websites. It is anticipated that the PSR, written in 11-point size Arial font, will require a report length of about five (5) to ten (10) pages. The PSR shall contain some very elementary drawings to illustrate the project area and some of the most important infrastructure.

4.6.3. Record of Implementation Decisions

The appointed PSP will be responsible for writing a Record of Implementation Decisions (RID)

A Memorandum of Agreement between the CD: IWRP and CD: ID dated March 2005, clarifies “the division and/or sharing of roles, responsibilities and accountability of the Chief Directorates through the various Project phases from planning to the commissioning of a project”.

The Memorandum states that once the detail planning of a project has been concluded and the scheme configuration and other related requirements for implementation have been approved by the Minister, the project shall be formally handed over from the CD: IWRP to the CD: ID for implementation. This formal handing-over of the project is concluded through an official document, the RID, and is signed off by responsible officials from both the CD: IWRP and the CD: ID. The RID describes the scope of the project, the specific configuration of the scheme to be implemented, the required implementation timelines, the finalization of required institutional arrangements and the required environmental mitigation measures as described in the project’s Environmental Impact Report (EIR) as well as any further requirements that may be prescribed by the Department of Environment, Forestry and Fisheries (DEFF) in its Record of Decision (ROD). Any work carried out outside of the scope of the RID will be considered unauthorized work, unless official approval for such work has been obtained from the CD: IWRP prior to such work being carried out.

The RID also forms part of the Implementation Agreement for the project that must be concluded between the DWS and the funding agency for setting out clear lines of responsibility and accountability as has been directed in the Ministerial Directive.

This RID provides the detailed planning guidelines for the project. The RID should, however, be read in conjunction with the original feasibility study reports and associated subsequent bridging study reports as well as the EIR.

4.7. Institutional, Financial and Operational Aspects

The following are examples of tasks that will be required:

- Determine the project revenue from sales of water based on the DWS's pricing strategy;
- Give recommendations for the institutional arrangement for each funding option;
- Determination of the relationship between the various project participants who will have an ongoing role during the project lifecycle;
- Determine legal, administrative and financial arrangements and responsibilities, as well as
- Develop procedures for transfer of assets and resources to ensure sustainable technical operation and maintenance of the system.

5. PROJECT PROPOSAL

The invited PSPs will be required to submit, at their own cost, the Project Proposal, in which they will show the ability to perform the Studies described in this brief. Two (2) separate proposals must be provided for evaluation purposes, namely a Technical Proposal and a Financial Proposal. Guidelines for the preparation of Project Proposals are presented in **Annexure A** and Project Proposals will be evaluated according to the scoring sheet in **Annexure B**.

Bidders should take note of the following requirements regarding the submission of Technical and Financial Proposals:

- One (1) original plus four (4) copies of the Technical Proposal must be submitted.
- One (1) original plus one (1) copy of the Financial Proposal must be submitted.
- Proposal documents must be placed singly in an envelope that is sealed and marked "ORIGINAL" or "COPY" as the case may be.
- Envelopes must be clearly addressed according to the instructions on the Invitation to Bid (Form SBD 1) and marked with the Bid Number, Bidder's name and address.
- The Technical Proposal and Financial Proposal must be submitted in separate sealed envelopes.

Joint ventures are required to submit a formal agreement between the parties involved in the joint venture. The percentage involvement of each firm in the joint venture must be clearly stated.

It will further be required of each bidding PSP to prepare the following documents to the DWS standards and to include them in their proposals

- Summary of Human Resource Utilization (**Annexure C1**).
- Cost Schedule per Task (**Annexure C2**), and

- Summary of Financial Proposal (**Annexure C3**).

Based on the evaluation of the Project Proposals a PSP will be appointed by the Client to undertake all the necessary work to comply with this brief.

The PSP shall nominate a Study Leader representing the PSP in execution of the study and in dealing with the Client. The PSP must also nominate an alternate Study Leader, who will take over from the primary nominee in the event of that person being temporarily unavailable, or not being able to take the study to its completion. The alternative candidate shall have similar credentials to the primary nominee.

Bidders should submit comprehensive proposals. This module will be managed to avoid Variation Orders as far as possible. Bidders who submit bids that show that they do not understand the scope of work and who do not supply comprehensive proposals (for example; man-hours required) will be evaluated accordingly.

An Inception Report is the first task to be done by the selected PSP prior to the formal appointment being finalized. In it, the PSP's proposal will be discussed with the Client and all aspects and uncertainties will be clarified. It will result in the final Terms of Reference for the study together with the final study cost. These will serve as a basis for, and will be recorded in, the Agreement with the Client.

5.1. Scope of Work

The Scope of Work must reveal the PSP's understanding of the Study. The proposed approach and methodology to be used during the Study should be outlined. A summary of the expected deliverables must be provided.

The PSP is encouraged to use this section in the proposal to present innovative approaches or other special features of the PSP's response to the ToR. The cost for execution of such unforeseen tasks should be included in the cost estimate for this study. The costs of these tasks should clearly and separately be specified in the Financial Proposal.

The Financial Proposal is a stand-alone document that should provide comprehensive information on the cost of performing the Study. It should show the cost of deliverables, based on the allocation of resources to the various tasks, sub-tasks and other activities required for the Study. The anticipated cash flow over the contract period is also required.

No provision shall be made in the Financial Proposal for escalation of professional fees and disbursements over the estimated contract period. All cost should form part of deliverables required to complete the study.

A Variation Order for an increase of the original contract amount shall only be considered in exceptional circumstances, such as additional work that was not reasonably foreseen and cannot be accommodated in the Study Budget by a re-allocation of funds. It is therefore expected that the PSP shall make provision in the Financial Proposal for all costs and expenses to undertake and complete the tasks described in the Scope of Services.

The text of the proposals should be to the point and not longer than thirty (30) A4 pages (excluding CVs) at an Arial font of 11 and 1,5 line spacing.

5.2. Work Programme

A detailed Work Programme, broken down to specific tasks and time allocated for each task must be submitted and the critical path shall be indicated. The Work Programme must indicate all study landmarks and target dates for deliverables.

5.3. Project Manager and the Supporting Team

The DWS will only appoint an Engineering Consultancy/PSP with experience in water resource matters and who has a sound knowledge of project management. It is therefore important that the proposal must present the key personnel in the team, their capabilities, experience as well as their roles and responsibilities in the Study.

Abbreviated CVs of the key personnel included in the team must form attachments to the proposal. Each CV must not be longer than one (1) page.

A list of similar projects and the cost of service have to be included. Contact details of clients must be supplied so that verification can be done if required.

5.4. Study Budget

PSPs shall submit in their proposals a Financial Proposal that will, apart from the total amount, also show the anticipated monthly cash flows over the anticipated contract period. These will be used for budgeting purposes by the DWS.

The Study Budget shall include professional time-based cost and disbursements for each primary task, monthly cash flow and estimated total cost. Human Resources Schedule, indicating the contributions by all study personnel and their hourly rates shall be presented. The budget should be tied to the proposed Work Programme. **The Study Budget must include VAT at 15%.**

The bidders must, in their proposals specify team composition with relevant cost for tasks on request. The team composition, cost and time required to complete task will have to be proposed by the interested bidders.

6. DELIVERABLES

Reports, presentations, analysis, letters and databases must be provided in Microsoft Word Applications and in PDF format (where possible). Approval to use other software must be obtained from the DWS. PSPs must make provision to supply certain deliverables in hard copy format.

The following is a guideline of the deliverables required. The bidder should scrutinize the list and in their proposal submit an updated list:

- A Work Breakdown Structure identifying the critical path and responsibilities;
- A Work Plan with a description of the different studies and detailed description of the various tasks that must be undertaken, showing inter-module links, expected technical deliverables and their specifications;
- A Study Gantt Chart with delivery dates;
- A Human Resource Schedule for every module with hourly rates and estimated time;
- A Study Budget - monthly cash and a total cash flow estimate;
- A Responsibility Structure with the functions of the different teams and committees;
- A description of all Study Status Reports and indicate when they are going to be delivered;
- A Management Information System comprising a formalized progress report, expenditure report and regular progress meetings for each module;
- Documentation of any other subsidiary task requested by the DWS Project Manager;
- Activities to date;
- A Decision Register with processes to record substantial decisions;
- Record of Liaison;
- Progress Reports;
- Applications in the required form and supported by appropriate documentation for all permits and authorizations required for the Project to proceed to the implementation phase;
- Executive Reports on the findings of studies and recommendations;
- RID Report for the formal hand over of the project to the DWS Chief Directorate Infrastructure Development for implementation;

- In addition to the above reports and draft reports capturing the essence of all tasks performed for example: a Financial and Institutional Report, Main Report, Water Resources Report, Feasibility Design, Geotechnical & Material Analysis etc.
- Full technical and other documentation and reports containing the essential outcomes of the studies, including a summary report, synthesizing and integrating all investigations done;
- Implementation Programme, and
- A Public Relations Plan;

The cost of deliverables must be defined in the Financial Proposal as it is the intention to manage this Study based on deliverables and not on the number of hours worked. The man-hours, which also need to be provided, must therefore be linked to suitable deliverables that can be achieved on a regular basis to facilitate the required cash flow.

This information on the cost of deliverables will form the basis of the Study Budget and shall include:

- a) Professional time-based costs and disbursements for each task;
- b) Sub-consultants whose costs will be recovered from the DWS;
- c) All provisional amounts as listed below;
- d) Value Added Tax (VAT) at 15% on the total estimated cost (not per task);
- e) Cash flow and estimated total cost;
- f) Links to the proposed Work Programme, and
- g) A breakdown by study team member of fees to be earned by Historically Disadvantaged Individuals (HDIs).

The Provisional Sums for use on the specified tasks below will be provided by the DWS when required for:

- a) Costs associated with the appointment of a subcontractor for the Ecological Reserve and Classification (refer **Section 4.4** above);
- b) Costs associated with the appointment of subcontractor for the materials investigation (refer **Section 4.5.2** above).
- c) Costs associated with the appointment of subcontractor for the geotechnical investigation (refer **Section 4.5.4** above).

A Provisional Sum is money that belongs to the DWS that is set aside for a specified task and cannot be re-allocated to other tasks without prior written approval from the DWS.

7. GENERAL INFORMATION

7.1. Client and Study Name

The Department of Water and Sanitation (DWS) will act as the Client for this proposed assignment.

This assignment shall be called: **THE CROCODILE (EAST) WATER PROJECT: MODULE1: TECHNICAL FEASIBILITY STUDY**

7.2. Level of Detail

The technical investigations must be undertaken at a very high level of detail, appropriate for taking decisions on to the implementation phase. The study deliverables should allow the project to proceed immediately to detailed design and construction within the shortest possible timeframe.

7.3. Retention on PSP Contracts

It is the DWS's practice to impose a retention amount equal to 10% of the approved contract amount until the Final Reports are submitted and approved by the Client. The retention clause comes into effect near the end of the study.

7.4. DWS's PSP Database

The PSP must be registered on the DWS's PSP Database.

7.5. Invoices

There must be no contingency allowance in the study cost estimate. All cost and time increases will be handled as Variation Orders on the original contract amount and time schedule. Variation Orders will have to be approved by the Departmental Bid and Adjudication Committee and the DWS Top Management. Only one invoice per month can be submitted to the DWS.

The Study Budget must provide a breakdown by study team member of fees to be earned based on the following categories: Black Male, Black Female, White Female, Disabled Person and White Male.

The Financial Proposal must be submitted as a **stand-alone** section and bounded as a standalone document. The cost of deliverables, where possible, must be defined in the proposals. It is the intention to manage this study leaning towards deliverables and not to pay for hours work or reworked. Invoices must be linked to deliverables therefore the proposals must be set up in such a way that it will be possible to do this. It must be possible for the DWS to track the contract progress by checking hours work and deliverables achieved. Thus, the DWS would want to see what the cost for a deliverable would be. Payments for deliverables will then be made once the DWS is satisfied with the deliverable.

The following is examples of deliverables: Development of the Project Gantt Chart, updating of the Gantt Chart, First Draft of the RID, Final Draft of the RID, review of reports, drafting of reports, writing minutes, drafting presentations etc.

7.6. Participation of HDIs and HDEs

The participation of HDIs in the study is strongly recommended. The definition of an HDI follows that of the DWS's current policy.

Please note that preference points claimed in the standard bidding document provided will be audited and independent PSP. Suppliers that provide incorrect or false information regarding the ownership of their company, runs the risk of being prosecuted with the possibility restriction from participating in contracts with any department in the sphere of Government. Particular attention should be given to the content of SBD 6, Par. 9.10

7.7. Credit Order Instruction

Credit Order Instruction form should be attached.

7.8. Intellectual Property Ownership

The ownership of all Intellectual Property derived from this study shall vest with the DWS.

7.9. Proposal Evaluation

Department of Water and Sanitation will evaluate all proposals in terms of the Preferential Procurement Regulations 2017. A copy of the Preferential Procurement Regulations 2017 can be downloaded from www.treasury.gov.za. In accordance with the Preferential Procurement Regulations 2017, submissions will be adjudicated on 80/20 points system and the evaluation criteria. A four phase evaluation criteria will be considered in evaluating the bid. On the receipt of the proposals, the evaluation criteria shown below will be used for the selection of the most suitable bidder to undertake the assignment

Phase 1: Pre-Qualification Criteria

Phase 2: Administrative Compliance

Phase 3: Functional / Technical Evaluation

Phase 4: Points awarded for Price and B-BBEE Status Level of Contribution (80/20 Preferential System)

7.9.1 Phase 1: Pre-Qualification Criteria

Only bidders that have a BBBEE status level of contributor Level 1 will be considered for this bid.

NB: Bidders who do not qualify with the prequalification criteria will be disqualified and not considered for phase 2.

7.9.2. Phase 2: Administrative Compliance

Please note that all bidders must comply with the following administrative requirements:

No.	Name of the document that must be submitted	Requirements
1	Invitation to bid –SBD 1	Please complete and sign the supplied <i>pro forma</i> document.
2	Registration with Central Supplier Database (CSD) as per National Treasury SCM Instruction 4 of 2015/17 2015/17 par 5.2	Attach proof of print out as proof of registration or supplier number.
3	Pricing Schedule – SBD 3.3	Please submit full details of pricing on Financial Proposal (Separate document from your Technical Proposal).
4	Declaration of Interest–SBD 4	Please complete and sign the supplied <i>pro forma</i> document.
5	Preference Point Claim Form – SBD 6.1	Non-submission will lead to a zero score on BEE.
6	Declaration of Bidder's Past Supply Chain Management Practices – SBD 8	Please complete and sign the supplied <i>pro forma</i> document.
7	Certificate of Independent Bid Determination –SBD 9	Please complete and sign the supplied <i>pro forma</i> document.
8	BBBEE Certificate	Non-submission will only lead to a zero score on BEE and not a disqualification.
9	General Conditions of Contract (GCC)	

Technical Proposals will be evaluated and scored without reference to the Financial Proposals.

7.9.3 Phase 3: Functionality (Technical) Evaluation

The 80/20 point system will be used in evaluating all proposals. The criteria and guideline weighting points applicable are detailed in the following paragraphs.

Values: 1 Very Poor..... 2 Poor.....3 Average.....4 Good.... 5 Excellent

Criteria		Points value	Weighting Points Awarded
Functionality	Past Experience of the Company in: <ul style="list-style-type: none"> • Feasibility and Final Designs of Water Recourse Projects (Dams); • Water Resource Strategies; and • Development of the operating rules for water supply and drought management; 		25
	≥10 years on all 3 items	5	
	7 to 9 years on all 3 items	4	
	5 to 6 years on all 3 items	3	
	3-4 years on all 3 items	2	
	1 - 2 years on all 3 items	1	

	Methodology: <ul style="list-style-type: none"> • Compliance with ToR; • Detailed method statement for each task within the study area; • Inclusion of Organogram; • Detailed programme and • Innovations to the ToR. 		35
	All 5 items addressed	5	
	4 items addressed	4	
	3 items addressed	3	
	2 items addressed	2	
	1 item addressed	1	

	Team Capability <ul style="list-style-type: none"> • Study Leader: The Study Leader should have a relevant experience as professional engineer in water resource development (dam) feasibility studies; • Task Leaders: The supporting team should have a range of experts in required fields (water resource engineer, dam design, hydrologist, geohydrologist, water quality specialist, environmentalist, stakeholder engagement specialist, etc). The Task Leaders should have relevant experience in the tasks that they will be responsible for. 		10
			20
	Study/ All task leader/s with min 10 years relevant experience	5	
	Study/ All task leader/s with min 9 years relevant experience	4	
	Study/ All task leader/s with min 7 years relevant experience	3	
	Study/ All task leader/s with min 5 years relevant experience	2	
	Study/ All task leader/s with less than 5 years relevant experience	1	

	Capacity building and training: <ul style="list-style-type: none"> Provide clear proposals on Capacity building and training of 10 DWS officials in project management and/or technical aspects to be undertaken as part of this Study. 		10
	Shows innovation in ensuring successful transfer of skills to DWS staff	5	
	Provides detailed methodology of training and capacity building as per ToR	4	
	Provides some methodology but not all aspects	3	
	Training in a workshop format only including WRPM	2	
	Training in a workshop format only excluding WRPM	1	
Total			100

Bidders must score the required minimum of **70 points (70%)**, or higher, for **Functionality** (Past Experience, Methodology, Team Capability and Capacity Building and Training), in order to qualify for further evaluation. Further evaluation is based on **Price and Preference** after the minimum score has been achieved by the bidder.

7.9.4 Phase 4: Price and Preference (B-BBEE Status Level of Contribution)

7.9.4.1 Price

A maximum of 80 points are allocated for price on the following basis:

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

Where:

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid

7.9.4.2 Preference (B-BBEE Status Level of Contribution)

In terms of Regulation 5(2) and 6(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 (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant Contributor	0

Bidders must submit their original and valid B-BBEE status level verification certificate or an originally certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.

Refer to SCM Bid Document SBD 6.1 (9) (issued with the Bid Documents) for detailed conditions regarding submission of B-BBEE status level verification certificate.

7.10 Submission of Proposals

Bidders should take note of the following requirements regarding the submission of Technical and Financial Proposals:

- One (1) original plus one(1) copy of the Technical Proposal must be submitted.
- One (1) original plus one (1) copy of the Financial Proposal must be submitted.
- Proposal Documents must be placed singly in an envelope that is sealed and marked “ORIGINAL” or “COPY” as the case may be.
- Envelopes must be clearly addressed according to the instructions on the Invitation to Bid (Form SBD 1) and marked with the Bid Number, and Bidder’s name and address.
- The Technical Proposal and Financial Proposal must be submitted in separate sealed envelopes.
- **N.B: ALL PROSPECTIVE BIDDERS ARE REQUESTED TO SUBMIT/ PROVIDE BOTH HARD COPY AND A SOFTCOPY ON A USB OR DISC OF THEIR COMPLETE BID DOCUMENT. THIS IS DUE TO THE CURRENT PREDICAMENT WE FIND OURSELVES IN DUE TO COVID 19**

Joint ventures are required to submit a formal agreement between the parties involved in the joint venture. The percentage involvement of each firm in the joint venture must be clearly stated.

The Department of Water and Sanitation is under no obligation to accept any bid, for whatever reasons it may consider appropriate, and reserves the right not to proceed with the appointment of any firm that responded to the invitation to tender.

8. BRIEFING SESSION AND CONTACT PERSONS

- Due to the COVID restrictions on gatherings and to allow for maximum participation of the prospective service providers, the department will not be holding any formal briefing session.
- In order to attend to any specific questions to this Terms of References, service providers are required to submit their formal enquiries directly to the Project Manager and the SCM office.
- Service Providers will submit their questions and the department will respond to such questions and also upload all questions and answers on the departmental website www.dwa.gov.za.
- The contacts listed below will be attending to all questions

This ToR and proposal invitation is being administered by the Directorate: Options Analysis (East). The contact persons for enquiries about this study are:

Contact Persons		
For Procurement:	For Technical Matters	For Bid Administrative Matters
<p>Mr P. Mabasa</p> <p>Tell: 012 336 7578</p> <p>Cell: 063 251 9486</p> <p>Email: MabasaP@dws.gov.za</p> <p>Address:</p> <p>Private Bag X 313</p> <p>PRETORIA</p> <p>0001</p>	<p>Mr JA Bester</p> <p>Tel: 012 336 8071</p> <p>Cell: 084 517 5560</p> <p>Fax: 012 336 7399</p> <p>E-mail: Besterk@dws.gov.za</p> <p><u>Address:</u></p> <p>Private Bag X 313</p> <p>PRETORIA</p> <p>0001</p>	<p>Mr Siyabonga Mbanjwa</p> <p>Tel: 012 336 8398</p> <p>Cell: 067 415 8340</p> <p>Fax: 012 336 7399</p> <p>E-mail: MbanjwaS@dws.gov.za</p> <p><u>Address:</u></p> <p>Private Bag X 313</p> <p>PRETORIA</p> <p>0001</p>

ANNEXURE A

GUIDELINES FOR PREPARATION OF A TECHNICAL PROPOSAL

The contents of the Technical Proposal must be to the point and limited to the information required. It should reflect a clear understanding of the Study to be undertaken and should concentrate on and stress the expertise and competence of the team.

The Technical Proposal should be in Arial font size 11 at 1.5 line spacing.

No financial information is to be included in the Technical Proposal.

C.1	Introduction
	Limited to two (2) A4 pages
1.a	An introductory section should provide a brief overview of the bidding organization with particular emphasis on available capacity to perform the Study.
C.2	Past Experience
	Limited to five (5) A4 pages
2.a	Information must be provided on recent (past five years) relevant assignments undertaken by the bidding organization (the PSP). Specific details must be given to indicate the extent to which these studies relate to the Scope of Services. The responsibility of the proposed Study Leader and the other key team members (Task Leaders and Specialists) for these past assignments must be specified. The Client organization, indicative professional fees and duration of the work programme must also be specified for each assignment.
C.3	Methodology
	Limited to 30 A4 pages
3.a	Bidders are required to provide a brief description of their approach and methodology, and comment on the ToR, illustrating their understanding of the challenges of the Study, time frames, and deliverables. This section may also be used to briefly present alternative proposals, innovative approaches or other special features of the Technical Proposal.
3.b	The Bidder is expected to provide a brief outline of the work to be done, placing emphasis on the important or critical aspects of each task. Where the Scope of Services is silent on particular issues, bidders must clearly state which issues can be expected to arise during the Study and which additional tasks may be necessary. These assumptions / additional tasks must then be scheduled and budgeted for in a separate section of the Financial Proposal, which is clearly indicated as additional

	tasks.
3.c	The Bidder must submit a proposed programme of work illustrating their understanding of the best way to organise the Study. This representation should show phases of the Study, tasks within phases and, where necessary, sub-tasks. The work programme must be presented in a Gantt Chart (Microsoft Project) illustrating the dates at which critical milestones can be reached and indicating the critical path.
C.4	Team Capability
	One to two A4 pages per CV
4.a	<p>A project team organogram must be provided indicating key positions such as Study Leader, Task Leaders and Specialists. Persons proposed for these positions must be identified and supported by CVs to be included in an Appendix. The CVs shall clearly contain the following critical information:</p> <ul style="list-style-type: none"> • Name of the person • Proposed position on the project team • Current employer • Present position with the current employer • Qualifications and dates obtained • Citizenship (in case of HDIs both present and in 1994) • Membership of professional bodies (Name of the body, registration number, registration date) • Specialisation • Applicable experience, related to the position in the project team
4.b	Brief capability statements must be given for each designated team member, emphasising recent experience relevant to the task envisaged. The availability of each designated team member for the expected duration of the Study must be indicated by reference to limitations that may be placed by other known commitments.
4.c	Information must also be given on the key support staff envisaged for the Study, supported by brief CVs, also included in an Appendix. Company profiles, etc. can be provided in a separate Appendix, but will not be used for the evaluation of bids.
4.d	Members of the proposed project team must be assigned to the tasks identified in the work programme. A schedule is required to indicate the anticipated time contribution of each member of the project team to each main task.
C.5	Capacity Building and Training
	Limited to five (5) A4 pages
5.a	The PSP must make provision for capacity building and training of DWS officials or interns in the water resource planning process and/or project management and/or technical aspects, to be

	undertaken as part of this Study. The content of the capacity building programme will need to be approved by the DWS.
5.b	<p>The interns could be seconded to the PSP for certain portions of the Study to gain practical experience. In this case the cost to the PSP would be time to mentor the interns and the provision of office space.</p> <p>Another option is the presentation of a one-day workshop(s) to present certain technical aspects of the study to the DWS officials.</p>
5.c	<p>The PSP shall make provision in the Financial Proposal for:</p> <ul style="list-style-type: none"> • Three (3) interns/officials to be seconded for a period of eight (8) months each; and • The presentation of two (2) one-day workshops.

ANNEXURE B

CRITERIA FOR EVALUATION OF A TECHNICAL PROPOSAL

Stage 2: Functional/Technical Evaluation

CRITERIA	WEIGHT (%)
Past Experience	
Provide details of work of a similar nature undertaken by the bidding organisation (the PSP). Specific details must be given to indicate the extent to which these previous studies relate to the work described in the Terms of Reference.	25
Methodology	
Present a short concise description of the Scope of Work, such as to reveal the bidder's understanding of the study. The proposed approach and methods to be used during the study should be outlined with emphasis on the important or critical aspects of each task. This section may also be used by the bidder to briefly present alternative proposals, innovative approaches or other special features of their proposal.	35
Team Capability (Not full PSP staff component)	
A study team organogram must be provided indicating key positions such as Study Leader, Task Leader and supporting Specialists who will be actively involved with the project. The organogram shall also indicate the levels at which there will be interaction with the Client and/or other interested bodies. Persons proposed for these positions must be identified and supported by CVs of one to two pages each to be included in an Appendix. Brief capability statements must be given for each designated team member, emphasizing recent experience relevant to the task envisaged (refer Section 7.5 above).	30
Capacity building and training	
Capacity building and training of the DWS officials or interns (up to 3) in project management and/or technical aspects to be undertaken as part of this Study (refer Section 7.7 above).	10
TOTAL	100
Note: Values: 1 Very Poor..... 2 Poor.....3 Average.....4 Good.... 5 Excellent	

ANNEXURE C.1

EXAMPLE: SUMMARY OF MANPOWER, TIME AND COST SCHEDULE

Team Member	Company Name	Company Position	Study Position (Activity)	Applicable experience in activity	HDI/Woman	Hourly Rate	Time on Study	% of time on Study	Total Cost
				Years	Yes/No	R/h	Hours		Rand
Initials & Name	ABC Consult	Director	Project Leader	25	Y / N	520	20	10.53	10 400
Initials & Name	ABC Consult	Associate	Task Leader, Hydrology	15	N / N	480	50	26.32	24 000
Initials & Name	ABC Consult	Engineer	Dam Design	13	N / N	400	30	15.79	12 000
Initials & Name	ABC Consult	Director	Task Leader, Dam Design	6	Y / Y	500	40	21.05	20 000
Initials & Name	ABC Consult	Associate	Hydrology	10	N / Y	120	15	7.89	1 800
Initials & Name	ABC Consult	Technician	Support	2	Y / Y	110	35	18.42	3 850
TOTAL							190	100	72 050

ANNEXURE C.2

EXAMPLE: TIME AND COST SCHEDULE

Task No.	Team Member	Company Name	Position	HDI	Study Position/Activity	Time Schedule	Hourly Rate (Excl. VAT)	Total Cost (Excl. VAT)
				Yes/No		Man hours	Rand/hour	Rand
1.	TASK: INCEPTION REPORT:							
1.1	Initials and Name	ABC Consult	Director	Y	Project Leader	6	440,00	2 640,00
1.2	Initials and Name	ABC Consult	Director	N	Task Leader: Dam Design	7	380,00	2 660,00
		Subtotal for professional fees				13		5 300,00
	Disbursements:							
	- Travel							2 000,00
	- Accommodation							1 000,00
	- Subsistence							550,00
	- Printing							350,00
		Subtotal for disbursements						3 900,00
		TOTAL COST TASK 1						9 200,00
2.	TASK: DAM DESIGN							
2.1	Initials and Name	ABC Consult	Director	Y	Task Leader	125	380,00	47 500,00
2.2	Initials and Name	ABC Consult	Associate	N	Structural Design	96	350,00	33 600,00
2.3	Initials and Name	ABC Consult	Associate	N	Hydraulics	72	320,00	23 040,00
2.4	Initials and Name	ABC Consult	Engineer	Y	Flood Hydrology	80	300,00	24 000,00
2.7	Initials and Name	ABC Consult	Associate	N	Seismic Assessment	40	300,00	12 000,00
		Subtotal for Professional Fees				413		140 140,00
	Disbursements:							
	- Travel							45 000,00
	- Accommodation							7 500,00
	- Subsistence							2 500,00
	- Printing							1 000,00
		Subtotal for disbursements						56 000,00
		TOTAL COST TASK 2						196 140,00
	SUBTOTAL FOR THIS PAGE (carry forward to next page)						426	205 340,00

ANNEXURE C.3

EXAMPLE: SUMMARY SHEET FOR FINANCIAL PROPOSAL

Task No.	Task Description	Total Cost of Task as per Cost and Time Schedule (Excl. VAT)	14% VAT	Total Task Cost (Incl. VAT)
		Rand	Rand	Rand
1.	Inception Report	14 240,00	1 993,60	16 233,60
2.	Water Resources	150 000,00	21 000,00	171 000,00
3.	Systems Analyses	80 000,00	11 200,00	91 200,00
4.	Hydrology and Yield Analysis	120 000,00	16 800,00	136 800,00
5.	Pre-feasibility Investigations	450 000,00	63 000,00	513 000,00
6.	Pre-feasibility of Transfer Options	104 900,00	14 686,00	119 586,00
7.	Feasibility Designs of Dams	352 240,00	49 313,60	401 553,60
8.	Pump Station Layout and Design	136 400,00	19 096,00	155 496,00
9.	Pipeline Alignment and Design	214 800,00	30 072,00	244 872,00
10.	Economic Studies	100 000,00	14 000,00	114 000,00
11.	Study Management and Reports	250 000,00	35 000,00	285 000,00
12.	Provisional Sum for (Task Name)	701 754.39	98 245,61	800 000,00
	TOTAL COST OF STUDY	2 674 334,39	374 406,81	3 048 741,20

RECOMMENDED/~~NOT RECOMMENDED~~

NAME: C Fourie

CHAIRPERSON: BID SPECIFICATION COMMITTEE

DATE: 16/02/2021