

water & sanitation

Department: Water and Sanitation REPUBLIC OF SOUTH AFRICA



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DEMOLISH AND REMOVE CONCRETE FOR THE RAISING OF CLANWILLIAM DAM PROJECT IN THE WESTERN CAPE FOR CONSTRUCTION SOUTH – CIDB CONTRACTOR GRADING DESIGNATION OF CIDB 8SE OR HIGHER

Created & Presented by: Ms. Thea Gouws & Mr. Manfred Röhrs

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SITE BRIEFING CONTENT

- WELCOME / INTRODUCTION
- SCOPE OF WORKS
- REQUIREMENTS (Administrative & "Technical")
- SITE VISIT

RAISING OF CLANWILLIAM DAM

DESCRIPTION OF PROJECT:

- The raised dam wall will be approximately 370m in length and 49m high.
- The works includes the addition of concrete on the downstream side, extending the apron, construction of an intake tower, river outlet control house, a power generating house, tunnel and cofferdams on the upstream side and various pipe outlet structures on the downstream side.
- Access to site is next to the N7 through controlled gates.

AERIAL VIEW OF THE EXISTING DAM AND THE SITE ESTABLISHMENT AREA



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OVERLAY OF PLANNED WORKS ON EXISTING DAM STRUCTURE



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SCOPE OF WORKS

- In the process of Raising Clanwilliam Dam wall, part of the existing structure will have to be removed safety.
- This needs to be conducted in a safe without interfering with other construction works <u>OR</u> damaging the integrity of the dam wall structure and existing works.
- This will include the transport (removal) of the demolished concrete parts

- The material to be removed must be spoiled on stockpiles on the upstream side of the embankment.
- The free haul of material from any point on the works to a disposal point within the 1.5 km radius of the left bank must be included in the rates.
- All material must be smaller than 900mm so that it can be crushed in a crusher.
- NO SPILLAGES will be accepted even if the materials fall in the water, it will be expected of the contractor to remove the materials and dumped/dropped it directly at indicated spoiled areas.



The following methods but not limited to can be used for the demolishing/removal of concrete:

- Controlled drilling and blasting techniques,
- Mechanical breaking using specialised demolition tools,
- High-pressure water jetting,
- Concrete sawing, and / or
- Diamond wire rope cutting (or similar rope cutting techniques).

NOTE: If controlled drilling and blasting techniques are used and **pre-approved by the Engineer**, a trial blast will be required.

With the trial blast a specification for the maximum allowable vibration can be compiled. See Particular Specification CWD 09 Blasting, paragraph CWD09.9

As the parts of the existing dam wall to be removed are on various parts of the dam wall, it will be a requirement for the contractor to do site establishment and deestablishment on various parts of the site.

Sections where concrete needs to be removed:

- Right Bank Non-overspill crest section cantilevers
- Block 23
- Hydro-power plant
- Spillway blocks 10, 12 & 14
- Left Bank Non-overspill crest section cantilevers
- Remaining Spillway blocks
- Concrete Apron
- Training Walls

CANTILEVERS





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HYDRO-POWER PLANT



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SPILLWAY



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LEFT BANK NOC



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RIGHT BANK NOC



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TENTATIVE PROGRAM DATES:

- Block 23 September 23
- Right Bank Overhangs Sept 24
- Apron November 24
- Blocks 10,12,14 January 25
- Spillway March 25
- Left Bank Overhangs August 25

NOTE:

Please take note of the supplied program dates and specific time periods that are planned for the various sections of concrete to be removed.

Prior arrangements will be made if the work required will be on earlier/ others dates.

Take note of working times and that no working at night will be permitted, except with written permission.

Please read through the document and make yourself acquaint with all the requirements highlighting only few below:

- Construction matters
- Health & Safety
- Environmental
- Local socio-economic development participation

FACILITIES TO BE PROVIDED BY CONTRACTOR

- Distribution of potable water on site for own workers
- Electrical power and distribution
- Water supplies for usages to do work
- Communication
- Resting and eating areas for own workers
- Sanitation and cleaning areas
- Own security
- NO accommodation and explosives (if applicable) allowed on site

GENERAL SITE INFORMATION

- The existing dam to stay in full operation;
- A full new outlet works (twin 1.8m diam pipes) with outlet works will be constructed for the raised dam;
- The outlet works will consist of reinforced concrete structures doweled and grouted into the existing rock;
- The new embankment structure will consist of IVRCC concrete and will be placed against the existing structure;
- The new embankment structure will include excavations on the downstream side of the existing embankment to engineered foundation level;
- Ensure that the maximum of 12.7mm/s ppv and frequency of 10Hz is adhered to

GENERAL SITE INFORMATION

- Various activities and other contractors will be on site to preform different tasks. This will lead to different equipment used on site on various places with different groups of work-force working.
- Therefore it is important to attend to requirements, communicated and do planning well in advance.

REQUIREMENTS (Administrative & "Technical")

EVALUATION CRITERIA

The bid will be evaluated on a six (6) phased approached outlined as follows :

- Phase 1 : Mandatory
- Phase 2: Administrative Compliance
- Phase 3 : Functionality (as per SANS 10845-3 clause 6.11.9)
- Phase 4: Price and preference (as per SANS 10845-3 clause 6.11.7 & 6.11.8)
- Phase 5: Evaluation Method 4 (as per SANS 10845-3 clause 6.11.5)

1) MANDATORY REQUIREMENTS:

Failure to submit any of the documents listed below will render your bid non-responsive and the bid will be disqualified.

- CIDB registration in terms of construction industry development board (CIDB) grade. (As per clause 5.1)
- Certificate of attendance at the compulsory site briefing session and or on the attendance register.
- Professional Engineer: Having a valid Pr. Eng. Civil Engineer or Mining Engineer registration with ECSA.

Evaluation criteria – Cont. 2) <u>ADMINISTRATIVE COMPLIANCE</u>

Please complete listed documents fully and submit as

No	Criteria	
1	Companies must be registered with National Treasury's Central Supplier Database must submit CSD report.	
2	Tax compliant with SARS. Attach a copy of valid Tax Compliance Status pin page (to be confirmed through SARS).	
3	Active registration with Company Intellectual Property Commission (to be verified through CSD and CIPC). Attach copy of Bidder's CIPC / CIPRO certificate.	
4	A valid copy of B-BBEE Status Level Verification Certificate (failure to submit, the Bidder will forfeit the preferential points to be claimed).	
5	A valid letter of Good Standing with the Compensation Commissioner in terms of the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 and or third parties' insurance registered with Financial Service Board (COID).	
6	Initial and sign Tender data section (T1 & T2) and all other required documents.	
7	Letter of appointment of duly authorized person to sign bid. Proof of such authority must be submitted with the bid. If by an individual, must be signed by that individual or by someone on his behalf duly authorised thereto and proof of such authority must be produced. If the bid is by a Company, it must be signed by a person duly authorised thereto by a Resolution of a Board of Directors a copy of which Resolution, duly certified by the Chairman of the Company is to be submitted with the bid.	
8	Complete, sign, submit SBD1, SBD3.2, SBD4, SBD6.1	
9	Certificate of completed project for the similar work for the value of R 30 million in the recent 10 years.	

3) FUNCTIONALITY COMPLIANCE

Functionality is the terminology used to define the technical ability of the Tenderer, based on experience, to deliver the required product in accordance with the specialised quality, reliability and functionality.

The Bidder must score a minimum of 70 points out of 100 to allow them to proceed to the next phase of evaluation.

Where the minimum point required is not met per subcriteria in phase 3 – functionality, the bid will be disqualified.

Functionality criteria		Sub-criteria	Maximum number of points
1	Company Experience	Schedule of similar current and past work undertaken Completion certificates of previous projects completed Contractable client reference letters Proof of the value of work undertaken	20
2	Managerial Capacity	Contracts Manager Construction Manager (Site Agent) Foreman Health and Safety officer Environmental Representative	30
3	 Preliminary Method statement: Demolishing and removal of concrete Project Program Equipment to be used Methodology Quality management plan Environmental, Health & Safety Plan 		50
	Maximum p	100	

Quality shall be scored by not less than three evaluators in accordance with the following schedules:

- Annexure G & H: Company Experience
- Annexure I & J: Managerial Capacity
- Annexure L: Schedule of plant and equipment
- Annexure M: Preliminary methods statement

The minimum number of evaluation points for functionality (quality) is 70

SCORING OF FUNCTIONALITY:

The evaluators are to score the functionality criteria's and sub-criteria's as per the below table (unless otherwise stated). The score allocated needs to be applied as a percentage of total maximum allowed points for the evaluated specific criteria. Each evaluation criteria will be assessed in terms of five indicators – no response, poor, satisfactory, good and very good. Scores of 0, 40, 70, 90 or 100 will be allocated to no response, poor, satisfactory, good and very good, respectively.

	Rating	Qualitative indicator or prompt for judgement			
Score		Example 1 (Proposed Organization and staffing)	Example 2 (Approach paper)	Example 3 (Knowledge of issues pertinent to the project)	
0	No response	Failed to provide information.	Failed to provide information.	Failed to provide information.	
40	Poor	The organization chart is sketchy, the staffing plan is weak in important areas. There is no clarity in allocation of tasks and responsibilities.	The technical approach and/or methodology is poor/is unlikely to satisfy project objectives or requirements. The tenderer has misunderstood certain aspects of the scope of work and does not deal with the critical aspects of the project.	Key staff have limited experience of issues pertinent to the project	
70	Satisfactory	The organizational chart is complete and detailed, the technical level and composition of the staffing arrangements are adequate.	The approach is generic and not tailored to address the specific project objectives and methodology. The approach does not adequately deal with the critical characteristics of the project. The quality plan, manner in which risk is to be managed, etc. is too generic.	Key staff have reasonable experience of issues pertinent to the project.	
90	0 Good Besides attaining the "satisfactory" rating, staff are well-balanced, i.e. they show good co-ordination, complimentary skills, clear and defined duties and responsibilities. Some members of the project team have worked together before on limited occasions.		The approach is specifically tailored to address the specific project objectives and methodology and is sufficiently flexible to accommodate changes that might occur during execution. The quality plan and approach to managing risk, etc. is specifically tailored to the critical characteristics of the project.	Key staff have extensive experience of issues pertinent to the project.	
100	Very good	Besides attaining the "good" rating, the proposed team is well-integrated and several members have worked together extensively in the past.	Besides attaining the "good" rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has outstanding knowledge of state-of-the-art approaches. The approach paper details ways to improve the project outcomes and the quality of the outputs.	Key staff have outstanding experience of issues pertinent to the project.	

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EXAMPLE OF EVALUATION:

CRITERIA	SCORE (out of 0% - 100%)	WEIGHT (POINTS)	TOTAL (A% score x B points)
Sub- Criteria	Score according to SANS ISO 10845-3 Table A.4	Max allowed points for this sub-criteria	
Example	70 score (=70%): response demonstrate the real understanding of requirements and evidence of ability to meet it.	5	= 5 * 70% = 3,5
Example 2	90 score (=60%): response demonstrate the real understanding of requirements and evidence of ability to meet it.	20	= 20 * 90% = 18

COMPANY EXPERIENCE

[MAX 20]

(ANNEXURE G)

The tenderer to provide at least a minimum of 3 projects:

- Signed completion certificates (Final IPC) <u>together with</u> client reference letters for similar works projects complete; &
- These final signed completion certificates (Final IPC), must be conducted in the recent 10 years for the value of R 30 million or more.

Tenderer can provide more than 3 signed <u>completion certificates</u> for relevant work completed, together with at least 3 client reference letters for 3 of these completion certificates submitted. The three client letters will be used to do reference checks on the contractor.

With proof of value together with completion certificates of previous projects completed, where the value of the projects is stated in other currencies, state the exchange rate at the time of project execution.

COMPANY EXPERIENCE (CONT.)

[MAX 20]

Client reference :

- Description of the project/ title of project,
- Scope of work completed,
- Period of the contract / time frame,
- Contract amount/value of work done,
- Client Name,
- Client contact details (Telephone number, Cell phone number and E-mail Address), &
- Reference letter to be sign by client/employer.

Only the following will be considered as similar work conducted:

Completed projects that dealt with demolishing and removal of concrete, for relevant work done, will be accepted for evaluation. The following suggested method and or combination of methods that could have been used are as followed:

- Controlled drilling and blasting techniques,
- Mechanical breaking,
- High-pressure water jetting,
- Concrete sawing; and/or
- Rope-cutting techniques.

MANAGERIAL CAPACITY

[MAX 30]

(ANNEXURE I)

Professional Contract Manager: Must have a valid SACPCMP registration with at least 7 years post registration experience in field building demolition (controlled demolition) \rightarrow proof of registration, qualifications and certificates together with full CV to be submitted.

Professional Engineer: Must have a valid Pr.Eng.in Civil Engineering or Mining Engineering registration with ECSA. With at least 7 years post registration experience in the field of building demolition (controlled demolition) \rightarrow proof of registration, qualification and certificates together with full CV to be submitted.

Construction Manager (Site Agent): Must have 7 years' experience in field of building demolition \rightarrow proof of any qualifications, registrations and certificates with full CV to be submitted.

Foreman: Must have 7 years' experience or more in field of rope cutting and blasting, and or in the methods to be used for concrete demolishing in the method statement,

→ proof of any qualifications, registrations and certificates with full CV to be submitted.

Health and Safety officer: Must have a valid registration with SACPCMP in health and safety with at least 5 years' experience after obtaining registration. → proof of any qualifications, registrations and certificates with full CV to be submitted.

Environmental Representative: Must have 5 years' relevant work experience \rightarrow proof of any qualifications, registrations and certificates with full CV to be submitted.

PRELIMINARY METHOD STATEMENT:

ME AN	THOD STATEMENT FOR CONCRETE DEMOLISHING D REMOVAL	TOTAL POINTS 50
SUI	B-CRITERIA (AS EXPLAINED BELOW)	MAXIMUM POINTS
1	Project program	5
2	Equipment to be used for these activities (As indicated in "schedule of plant and equipment list" – Annexure L)	5
3	Methodology – that will be used to do the work	25
4	Quality management plan	5
5	Environmental, Health & Safety	10

Requirements under is explained per sub-criteria in the Annexure M

4) **PRICE AND PREFERENCE:**

Preferential Procurement Regulations, 2022, will be used to evaluate this proposal as per the applicable threshold value.

Bid proposals will be evaluated based on the 90/10 preference points system in accordance with the PPPFA Act (Act no. 5 of 2000). Where a maximum of 90 points will be awarded in respect of price and a maximum of 10 points will be awarded for specific goals.

5) EVALUATION METHOD

Method 4: Financial offer, quality and preference

This method shall apply for the evaluation of this tender

The total number of tender evaluation points (T_{EV}) shall be determined in accordance with the following formula:

• $T_{EV} = f_1 (N_{FO} + N_P) + f_2 N_Q$

Where:

- $f_1 \& f_2$ are fractions,
- f_1 equals 1 minus f_2 ; and
- f_2 equals 0,5
- N_{FO} → is the number of tender evaluation points awarded for the <u>financial offer</u> made in accordance with SANS ISO 10845-3: 2022 Ed2 clause 6.11.7, (where N_{FO} is maximum 90 points);
- *N_P* → is the number of tender evaluation points awarded <u>for</u> preference points claimed for specific goals in accordance with SANS ISO 10845-3: 2022 Ed 2 clause 6.11.8, (where *N_P* is maximum 10 points);
- N_Q →is the number of tender evaluation points awarded for <u>functionality (quality)</u> in accordance with SANS ISO 10845-3:2022 Ed 2 clause 6.11.9, (where N_Q is maximum 100 points).

Example:

For example, if a Tenderer scores the following:

75 points for pricing (N_{FO}) out of 90;

6 points for preferencing (N_P) out of 10; and

70 points for functionality (quality) (N_Q) out of 100

And the fractions are f_2 equals f_2 equals 0,5

Where the weights are:	Example values scored
Total points for financial offer $(N_{FO}) \rightarrow 90$	75
$N_P \rightarrow 10$	6
N _Q → 100	70
Calculation:	Example of calculation
Where: $f_1(N_{FO+}N_P)$	0.5 * (75 + 6) = 40.5
And where: $f_2 N_Q$	0.5 * 70 = 35
Total Tender evaluation points $(T_{EV}) \rightarrow 100$	75.5

RETURNABLE REQUIRED:

Doc. Ref.	Document/Schedule		
Nr.	Documenty Schedule		
SBD 1	SBD 1: Invitation to Bid		An original or certified copies valid Tax Clearance
SBD 3.2	SBD 3.2: Bill of Quantities – Non-Firm Price	ANNEXURE C	Certificate or SARS Pin issued by the South African
SBD 4	SBD 4: Declaration of Interest		Revenue Services.
	SBD 6.1: Preference Points Claim Form: General	ANNEXURE D	Central Supplier Database (CSD) proof of registration
360 0.1	Conditions and Definitions		containing MAAA number.
	Certificate of Attendance at Compulsory Site		Originally certified copies of Bidder's CIPC company
FURINIA	Briefing session	ANNEXURE E	registration documents listing all members with
FORM B	Record of Addenda to Tender Documents		percentages
FORM C	Compulsory Declaration	ANNEXURE F	Letter of good standing from COIDA (Compensation for
FORM D	Certificate Authority of Signatory		Occupational Injuries & Diseases Act)
FORM F	Annual Financial Statements Declaration	ANNEXURE G	Company experience
EOPMG	Pro Forma Form of Offer and Acceptance (Part		
	C1.1)	ANNEXURE H	Schedule of similar work undertaken
FORM H	Contract Data (Part C1.2)		
FORM I	Pro Forma Performance Guarantee (Part C1.3)	ANNEXURE I	Managerial Capacity
FORM J	Contractor's health and safety declaration	ANNEXURE J	Schedule of Qualifications / Experience of key project
FORM K	Health and Safety Act agreement		team members.
FORM L	Verification Documentation		Schedule of Proposed sub-contractor together with a
	Preferencing Schedule for Broad Based Black	ANNEXURE K	pro-forma sub-contracting agreement signed by both
ANNEXURE A	Economic Empowerment Status, together with		parties
	original or certified copy of B-BBEE certificate		
	A certified copy of Certificate of Contractor	ANNEXURE L	Schedule of Plant and Equipment
ANNEXURE B	Registration issued by the Construction Industry		Preliminary Method Statements: Demolishing and
	Development Board (CIDB)		removal of concrete

QUESTIONS ???



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