

NGWATHE LOCAL MUNICIPALITY

TECHNICAL SERVICES

**CONTRACT NO: NLM: TEC-133/18**

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Contractor

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Employer

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**NGWATHE LOCAL MUNICIPALITY**

**TECHNICAL SERVICES**

**CONTRACT NO: NLM: TEC-13/18**

**BID FOR THE APPOINTMENT OF A CONTRACTOR FOR THE INSTALLATION OF THE CONCRETE PALISADE FENCE AT THE BORROW PIT IN TUMAHOLE EXTENSION 7**

**C3.1 STANDARD SPECIFICATIONS**

**The standard specifications on which this contract is based are the SANS 1200 Standardized Specifications as amended.**

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SANS) in Pretoria.

SANS 10396:2003: Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures

SANS 1914-4 (2002) : Targeted Construction Procurement (local resources)

SANS 1921 – 1 (2004): Construction and Management Requirements for Works Contracts  
Part 1: General Engineering and Construction Works and where accommodation of traffic is involved:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

**NGWATHE LOCAL MUNICIPALITY**

**TECHNICAL SERVICES**

**CONTRACT NO: NLM: TEC-133/18**

**C3.2 PROJECT SPECIFICATIONS**

**STATUS**

The Project Specifications, consisting of two parts, forms an integral part of the contract and supplements the Standard Specifications.

Part A contains a general description of the works, the site and the requirements to be met.

Part B contains variations, amendments and additions to the Standard Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standard or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer before the execution of the work under the relevant item.

The standard specifications which form part of this contract have been written to cover all phases of work normally required for road contracts, and they may therefore cover items not applicable to this particular contract

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness2

## PART A: GENERAL

### PS-1 PROJECT DESCRIPTION

#### 1.1 Employer's objectives

The project objective is to provide a sustainable security around the Ngwathe Municipal Main building and Forum building respectively, The employer's secondary objectives during construction are to provide local enterprises and local labour with a substantial portion of work, provide training to local labourers and emerging entrepreneurs, and to use labour intensive methods and to execute the work with a high degree of safety.

#### 1.2 Overview and location of the works

The description of the project contained in this section is merely an outline of the contract works and shall not limit the work to be carried out by the Contractor under this contract. Approximate estimated quantities of each type of work to be carried out are listed in the bill of quantities bound in this document. The Contractor will carry out all construction required instructed by Client.

The works are to benefit the employees and customers of Ngwathe local Municipality by provision of a security fencing -intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work.

The project is located in Parys, in Free State Province and is accessible through road R59

The works included in this contract are as follows:

- Installation of Concrete Palisade Fencing around the borrow pit
- Installation of 1 pedestrian gates for easy access and employees of the Municipality
- 1 Vehicle Gates for motorists

Details of the above Works are indicated on the drawings.

This contract covers the supply of all material, labour, plant and equipment for construction. The scope covers the establishment of camp and plant on site, and the provision of offices and accommodation for supervisory staff, as well as training where applicable.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

### **1.3 Procurement**

#### **1.3.1 Preferential procurement procedures**

Direct Preference is given on the basis of the Targeted Enterprise status of the tenderer. Functionality points are allocated based on the Contract Participation Goal offered in terms of the engagement of Local Enterprises.

#### **1.3.2 Scope of mandatory subcontract work**

There is no mandatory subcontracted work, other than that the Contractor must subcontract to, or engage local enterprises so as to achieve his offered Contract Participation Goal. The choice of who and for which portions of the work he does that, is his own discretion. However, the contractor commits to work closely with the Community Development Workers, who will compile a local resource database to assist the contractor in maximising the use of local resources. In inviting local enterprises to tender for subcontracted work, the contractor shall include the local enterprises identified by the Community Development Workers, except if they are deemed by the contractor to be unfit to provide the service or deliver the goods at the required quality, taking into account the entrepreneurial training available to empower them. In the event of a dispute between the Community Development Workers and the contractor as to the ability of an identified service local enterprise for a particular subcontract, the final choice shall lie with the contractor, following facilitation by the CLO and the Engineer.

### **1.4 Construction**

#### **1.4.1 Applicable SANS 2001 standards for construction works**

There are no SANS 2001 standards applicable

#### **1.4.2 Applicable national and international standards**

The relevant provisions of the SANS 1200 as amended shall apply to the contract.

## **PS-2 DESCRIPTION OF THE SITE AND ACCESS**

### **2.1 Location of site**

The project is located as shown on the locality plan bound into the back of this book, Incidental intrusion into private property outside the road reserve shall not be permitted without the owner's written authority. Any such agreement reached with a private landowner (occupier) shall include the proviso that any material or equipment on that site shall remain the exclusive property of the Employer in terms of the contract.

### **2.2 Access to site**

The contractor shall be responsible for the maintenance and reinstatement of damage caused by him or his agents/deliveries to vehicular access tracks and

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

rights of way. No damage to fauna and flora located outside the limits of the project will be permitted on the contract.

### PS-3 DETAILS OF THE WORKS

A brief detail of the works for which this specification is applicable is as follows:

#### Concrete Palisade Fence

. The following construction activities will be executed:

1. For Trade Preamble Please refer to 'Model Preambles for Trades' (1995 edition) for the full descriptions of material to be used and work to be done in this Bill.
2. to other trades and preambles for preambles land full descriptions of items not fully described in this trade which shall apply equally to the work in this trade, unless otherwise: described
3. The descriptions of fencing shall be deemed to include site clearance,, preparation 'of ground, as necessary and the Contractor is i.e price accordingly;
4. The .descriptions-of bases and Footings to fencing shall be deemed ; to including for compaction, disposal of surplus excavated material to a dumping site: located by the contractor, risk of collapse and keeping excavations
5. Bolts : (note all bolt nuts should no spot welded)
6. 12mm Diameter galvanised steel straining.-bolts 150 mb) including boil nut and washers -or. .approved test installation of the palisade fence
7. . All fencing components are to be hot-dip galvanised after manufacture:.
8. Take down and remove Existing stock or diamond mesh fence complete with posts, gates footings, etc
9. Site Clearance:
10. Excavate in earth not exceeding 200mm .girth and fit adjacent portion to make up levels under fence line.
11. Fencing 1800mm high; Termed-.by pales of 2370 X 75 X 100mm at the bade tapering to 80mrn at the front twice hipped to take bolted connection at 70mm gaps. 1908 x 50 x 1.50mm with nine 10 mm holes .-.to lake 8qnrri carriage type
12. Pedestrian Gales
13. Vehicle gates

#### Community Liaison

The Community Liaison Officer is a vital means of communication between all parties involved with the project. The contractor shall make use of this communication channel, and shall appoint from amongst his site personnel a responsible person to participate in the affairs of the Community Development Workers.

It is mandatory that the Contractor shall interact with the community via proactive project liaison and project participation by its leaders and constituted organisations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the project.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

Local labour is to be used and the employment of such labour is to be done in conjunction with the Community Liaison Officer (CLO). Community Liaison Officer shall assist the Contractor with the recruitment of local labourers to ensure an equal distribution of people employed between the various civic and tribal structures in the area.

The Councillors shall identify and nominate a Community Liaison Officer to be appointed and paid by the Contractor out of the contract.

The CLO shall be full time employed on the project for the duration of the project.

The CLO shall be the communication link with the contractor.

The CLO and the Contractor's representative on the Councillors shall thus work close together.

The CLO shall attend all technical meetings held by the Employer, the Contractor and the Engineer, and report to the Councillors.

The CLO shall assist in compiling a skills audit of the available skills in the community.

The CLO's functions shall further be as set out by the Council and requested by the Contractor.

A minimum payment of R 7500.00 is required for the C.L.O for the duration of 3 months

### **3.8 Construction in confined areas**

It may be necessary for the Contractor to work within confined areas. Except where provided for in the specifications, no additional payment shall be made for work done in restricted areas

However, the Contractor shall note that, unless provided for in terms of the scheduled payment items in the SANS 1200 Standard Specifications or these project specifications, measurement and payment shall be in accordance with the specified cross sections and dimensions only, irrespective of the method used for achieving these cross sections and dimensions, and that the tendered rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions, and that no extra payment shall be made nor shall any claim for additional payment be considered in such cases.

## **PS-4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS**

### **4.1 General**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2



The Contractor is referred to SANS 1921: 2004 parts 1, 2 and 3: Construction and Management Requirements for Works Contracts. These specifications shall be applicable to the contract under consideration and the Contractor shall comply with all requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

#### **4.3.1 Planning and Programme (*Read with SANS1921-1:2004 clause 4.3*) Preliminary programme**

The Contractor shall include with his tender a preliminary programme on the prescribed form to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

Tenderers may submit tenders for an alternative Time for Completion in addition to a tender based on the specified Time for Completion. Each such alternative tender shall include a preliminary programme similar to the programme above for the execution of the works, and shall motivate his proposal clearly by stating all the financial implications of the alternative completion time.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special nonworking days as specified in the Special Conditions of Contract, in the Project Specifications and in the Contract Data.

The following constraints shall be taken into account in preparing the preliminary construction programme which must be submitted with the Tender. These same constraints shall apply to the final construction programme.

- a) The Contract time is approximated at 5 months but the contractors may tender their period of construction. Plant and personnel requirements to complete the project must be incorporated in the Tender.
- b) The relocation of services (if required)
- c) Ancillary works by Emerging Contractors

#### **Programme in terms of Clause 12 of the General Conditions of Contract**

It is essential that the construction programme, which shall conform in all respects to Clause 12 of the General Conditions of Contract, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the tender shall be used as basis for this programme.

The Contractor's attention is also drawn to clause 40.3 of the General Conditions of Contract 2004.

#### **4.4 Quality Assurance (QA) (*Read with SANS 1921 – 1: 2004 clause 4.4*)**

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness2

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Engineer. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his own workmanship in accordance with his QA-system. His attention is drawn to the fact that it is not the duty of the Engineer or the Engineer's representative to act as foreman or surveyor.

See B1205 below for the arrangement regarding the site laboratory.

#### **4.13 Survey beacons (*Read with SANS 1921 - 1: 2004 clause 4.15*)**

The Contractor shall take special precautions to protect all permanent survey beacons or pegs such as bench-marks, stand boundary pegs and trigonometrical beacons, regardless whether such beacons or pegs were placed before or during the execution of the Contract. If any such beacons or pegs have been disturbed by the Contractor or his employees, the Contractor shall have them replaced by a registered land surveyor at his own cost.

#### **4.14 Existing Services (*Read with SANS 1921 - 1: 2004 clause 4.17*)**

The Contractor shall make himself acquainted with the position of all existing services before any excavation or other work likely to affect the existing services is commenced.

The Contractor will be held responsible for any damage to known existing services caused by or arising out of his operations and any damage shall be made good at his own expense. Damage to unknown services shall be repaired as soon as possible and liability shall be determined on site when such damage should occur.

A provisional amount is included in the bill of quantities for the protection of services.

Prior to commencing construction activities in a particular area, the Contractor shall also diligently enquire of local landowners as to whether there are any other known services which have not been shown on the drawings but which may be affected by the construction activities in that area, and any such services shall be brought to the attention of the Engineer immediately.

The Contractor shall take note of the requirements of clause 1202 of the standard specifications with regard to services.

C4.4 contains an inventory of some of the existing services known to the engineer at the time of tendering. This is by no means a comprehensive inventory, and the contractor shall ascertain the status of existing services

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

#### **4.15 Health and Safety (Read with SANS 1921 - 1: 2004 clause 4.18)**

##### **4.15.1 General statement**

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the

OHSA 1993 Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act in the form as included in section C1.2.4

##### **Health and Safety Specifications and Plans**

###### **(a) Employer's Health and Safety Specification**

The Employer's Health and Safety Specification is included in Part E of the Project Specifications.

###### **(b) Tenderer's Health and Safety Plan**

The Tenderer shall submit before commencement of his works his own documented Health and Safety Plan for the execution of the works under the contract. His Health and Safety Plan must comply with the employer's specification, at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 7 to 28;
- (ii) Pro-active identification of potential hazards and unsafe working conditions;
- (iii) Provision of a safe working environment and equipment;
- (iv) Statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 5*);
- (v) Monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (vi) details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
- (vii) Details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2003.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

Cost of compliance with the OHS Act Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

#### **4.17 Management of the environment (*Read with SANS 1921 - 1: 2004 clause 4.19*)**

Respect for the environment is an important aspect of this contract and the Contractor shall pay special attention to the following:

##### **(a) Natural Vegetation**

The Contractor shall confine his operation to the limits of the road reserve for the purpose of constructing the works and where applicable detours, shall be sited in consultation with the Engineer and the local communities.

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

##### **(b) Fires**

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

The contractor shall engage actively in the local fire protection and disaster management structures.

### (c) Environmental Management Plan

In addition to the above, all requirements according to the Environmental Management Plan as detailed in C3.3, Particular Specifications Part C Section 2, shall be adhered to.

To be highlighted is that it is a requirement of the Record of Decision regarding the Environmental

Management Plan that the Employer shall appoint a full time Environmental Control Officer whose duty it shall be to independently monitor compliance with the environmental requirements of the contract and to report to the Employer. The ECO shall be given full access to the site, and shall be invited to all Community Development Workers and technical project meetings and shall receive all minutes. The ECO shall be skilled in the specific environmental mitigation measures provided for in the scope of works, and shall provide the project technical team with technical guidance. However, the work instructions shall be issued by the Engineer.

## PS-5 EPWP LABOUR INTENSIVE SPECIFICATION

### 5.1 Labour intensive competencies of supervisory and management staff

Contractors having a CIDB contractor grading designation of 2CEPE, 2SQ or higher and higher shall only engage supervisory and management staff in labour intensive works who have either completed, or for the period 1 April 2004 to 30 June 2006, are registered for training towards, the skills programme outlined in Table 1.

The managing principal of the contractor, namely, a sole proprietor, the senior partner, the managing director or managing member of a close corporation, as relevant, having a contractor grading designation of 1CE, 2CE, 3CE, 2CE, 2SQ or higher, 2CE and 3CE shall have personally completed, or for the period 1 April 2004 to 30 June 2006 be registered on a skills programme for the NQF level 2. All other site supervisory staff in the employ of such contractors must have completed, or for the period 1 April 2004 to 30 June 2006 be registered on a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards

Table 1: Skills programme for supervisory and management staff

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader / supervisor	2	Apply Labour-intensive Construction systems and Techniques to Work Activities	This unit standard must be completed, and

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

Personnel	NQF level	Unit standard titles	Skills programme description
		Use Labour-intensive Construction Methods to Construct and Maintain roads and Storm water Drainage Use Labour -intensive Construction Methods to Construct and Maintain Water and Sanitation Services Use Labour-intensive Construction methods to Construct, Repair and Maintain Structures	one of these 3 unit standards be used
Foreman / supervisor	4	Implement Labour-intensive Construction systems and Techniques Use Labour-intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage Use Labour-intensive Construction Methods to Construct and Maintain Water and Sanitation Services Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	This unit standard must be completed, <b>and</b> any one of these 3 unit standards be used
Site Agent / Manager (ie the contractor's most senior representative who is resident on the site)	5	Manage Labour-intensive Construction Processes	Skills Programme against this single unit standard

## 5.2 Employment of unskilled and semi-skilled workers in labour-intensive works

### 5.2.1 Requirements for the sourcing and engagement of labour

5.2.1.1 Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and the specifications.

5.2.1.2 The rate of pay set for a day task is 90% of the statutory daily wage applicable for the area.

5.2.1.3 Tasks established by the contractor must be such that:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

- a) The average worker completes 5 tasks per week in 40 hours or less; and
- b) The weakest worker completes 5 tasks per week in 55 hours or less.

5.2.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 5.2.1.3.

5.2.1.5 The Contractor shall, through the Community Liaison Officer, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

- a) Where the head of the household has less than a primary school education;
- b) That has less than one full time person earning an income;
- c) Where subsistence agriculture is the source of income.
- d) Those that are not in receipt of any social security pension income

5.2.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:

- a) 60 % women;
- b) 20% youth who are between the ages of 18 and 25; and
- c) 2% on persons with disabilities

## 5.2.2 Specific provisions to training

The skills audit conducted by the Community Development Workers will inform the Contractor's training programme. The contractor shall hence design a training programme for labour and entrepreneurs and submit it to the engineer for approval.

This programme shall be submitted to and discussed with the Department of Labour (see below). Such training that cannot be provided by the DOL will be provided by commercial training institutions on a quotation basis. This category of training paid under the contract, must be endorsed by the Engineer prior to the appointment of the training institutions.

The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

The contractor shall do nothing to dissuade targeted labour from participating in training programmes.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

An allowance equal to 100% of the daily rate shall be paid by the contractor to workers who attend formal training.

Proof of compliance with the requirements of the above must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2



## **PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS**

### **B.1. APPLICABLE STANDARDISED SPECIFICATIONS**

Although not bound in nor issued with this document the following Standardised Specifications shall form part of the Contract and, notwithstanding the provisions of sub-clause 2.2 of SANS 1200A, the editions specified below shall apply:

SANS 1200 A	-	GENERAL
SANS 1200 C	-	SITE CLEARANCE (AS AMENDED 1982)
SANS 1200 D	-	EARTHWORKS
SANS 1200 LB	-	BEDDING
SANS 1200 LD	-	SEWER

### **B.2 VARIATIONS AND ADDITIONS TO SANS 1200 STANDARDIZED SPECIFICATIONS**

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

#### **B.2.1 VARIATIONS ON STANDARDIZED SPECIFICATIONS**

Should any requirement of the Project Specification conflict with any requirement of the Standardised or Particular Specification, the requirement of the Project Specification shall prevail.

#### **PSA            GENERAL**

#### **PSA 3            MATERIAL (Clause 3)**

#### **PSA 3.1            QUALITY (Sub-Clause 3.1)**

All material required for this contract shall bear the official standardisation mark.

#### **PSA 4            PLANT (Clause 4)**

#### **PSA 4.1            CONTRACTOR'S OFFICES, STORES AND SERVICES (Sub-Clause 4.2)**

Add the following to this sub clause:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

**PSA 4.1.1 Storage (New Sub-clause)**

The Contractor shall supply sufficient protection for perishable material to the satisfaction of the Engineer, and all materials shall be used in the order in which it was delivered. Cement older than three months shall be removed from the site and shall not be used in the Works.

**PSA 4.1.2 Restrictions on Employee Accommodation**

No housing is available for the Contractor's employees, and the contractor shall make his own arrangements to house his employees and transport them to site.

The Employer will place at the disposal of the Contractor and area to able him to erect his site offices, workshops, stores, and any temporary camp the Contractor may wish to erect for his personnel. The temporary housing and ablution facilities shall comply with the requirements of the local authority

**PSA 4.2 CAPACITY OF PLANT AND EQUIPMENT (New Sub-Clause)**

Add as Clause 4.3:

The Contractor shall supply plant and equipment in sound working condition and of adequate capacity to complete the Works well within the period or periods specified or stated in the appendix to the tender. In addition, he shall have available on the Site adequate standby plant ensure that operations designed to be executed continuously are not disrupted because of breakdown of any plant provided for such operations.

No laboratory facilities are required on site. The Contractor shall use an independent laboratory for the necessary tests.

The cost of all testing to be carried out by the Contractor in terms of the requirement of the relevant SANS 1200 standards shall be included in the rates for the various work items listed in the Schedule of Quantities. No separate payments shall be made in this regard.

The Engineer may order the Contractor to arrange special check tests to be carried out by an approved independent laboratory. The results of these tests shall be made available to the Contractor.

The cost of special check test ordered by the Engineer shall be borne by the Employer if the test results indicate compliance with the specification and by the Contractor if the results indicate noncompliance with the specification.

**PSA 8 MEASUREMENT AND PAYMENT (Clause 8)**

**PSA 8.1.1 METHOD OF MEASUREMENT, ALL SECTIONS (Sub-Clause 8.1.1)**

In no case will any dimensions be allowed or any quantities be included in the measurement for payment which shall exceed the dimensions required by the contract, or as ordered in writing by the Engineer in the case of extra work.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

The quantities as shown in the Bill of Quantities, are estimated quantities and are used for comparing tenders and awarding of the contract. It shall be noted that only the actual work executed or materials supplied will be measured and paid for, therefore billed quantities may be increased or decreased as allowed for in the General Conditions of Contract.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

## PART C: OHSA 1993 SAFETY SPECIFICATION

### E2. DEFINITIONS

**For the purpose of this contract the following shall apply:**

**(a) “Employer”** where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract and it shall have the exact same meaning as “client” as defined in the Construction Regulations 2003.

**“Employer” and “client”** is therefore interchangeable and shall be read in the context of the relevant document.

**(b) “Contractor”** wherever used in the contract documents and in this specification, shall have the same meaning as “Contractor” as defined in the General Conditions of Contract.

In this specification the terms **“principal contractor”** and **“contractor”** are replaced with “Contractor” and “subcontractor” respectively.

For the purpose of this contract the Contractor will, in terms of OHSA 1993, be the mandatory, without derogating from his status as an employer in his own right.

**(c) “Engineer”** where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

### E3. TENDERS

**The Contractor shall submit the following with his tender:**

(a) A documented Health and Safety Plan as stipulated in Regulation 5 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2003 and will be subject to approval by the Employer;

(b) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2003;

(c) A declaration to the effect that he made provision in his tender for the cost of the health and safety measures envisaged in the Construction Regulations.

(d) Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely in accordance with the Construction Regulations.

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness2

#### **E4. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK**

After award of the contract, but before commencement of construction work, the Contractor shall, in terms of Regulation 3, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) The use of explosives;
- (b) Construction work that will exceed 30 days or 300 person-days;
- (c) Excavation work deeper than 1,0m;

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site.

#### **E5. RISK ASSESSMENT**

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 7 of the Construction Regulations 2003). The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

#### **E6. APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS**

##### **6.1 Health and Safety plan**

The Contractor shall appoint his employees and any subcontractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The Contractor shall ensure that all subcontractors and employees are committed to the implementation of his Safety Plan.

##### **6.2 Health and safety induction training**

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The Contractor shall ensure that every employee on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

## **E7. APPOINTMENT OF SAFETY PERSONNEL**

### **7.1 Construction Supervisor**

The Contractor shall appoint a full-time Construction Supervisor with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

### **7.2 Construction safety officer**

Taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time Construction Safety Officer if so decided by the Inspector of the Department of Labour. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision shall be made by the Contractor in his rates, to cover the cost of this dedicated construction safety officer appointed after award of the contract.

### **7.3 Health and safety representatives**

In terms of Section 17 and 18 of the Act (OHSA 1993) the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a health and safety representative whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 100 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

### **7.4 Health and safety committee**

In terms of Sections 17 and 18 of the Act (OHSA 1993) the Contractor (as employer), shall establish one or more health and safety committee(s) where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

## 7.5 Competent persons

In accordance with the Construction Regulations the Contractor has to appoint in writing competent persons responsible for supervising construction work on each of the following work situations that may be expected on the site of the works.

- (a) Risk assessment and induction training as described in Regulation 7 of the Construction Regulations;
- (b) Fall protection as described in Regulation 8;
- (c) Formwork and support work as described in Regulation 10;
- (d) Excavation work as described in Regulation 11;
- (e) Demolition work as described in Regulation 12;
- (f) Scaffolding work as described in Regulation 14;
- (g) Suspended platform operations as described in Regulation 15;
- (h) Material hoists as described in Regulation 17;
- (i) Batch plant operations as described in Regulation 18;
- (j) Explosive powered tools as described in Regulation 19;
- (k) Cranes as described in Regulation 20;
- (l) Construction vehicle and mobile plant inspections on a daily basis by a
- (m) Competent person as described in Regulation 21(1);
- (n) Control of all temporary electrical installation on the construction site as described in Regulation 22;
- (o) Stacking and storage on construction sites as described in Regulation 26; and
- (p) Inspections of fire equipment as described in Regulation 27.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities to comply with all requirements of the Construction Regulations.

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Contractor

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Witness 1

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Employer

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Witness 1

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Witness2

## E8. RECORDS AND REGISTERS

In accordance with the Construction Regulations the Contractor is bound to keep records and registers related to health and safety on site for periodic inspection by inspectors, the Engineer, the Employer, trade union officials and subcontractors and employees.

The following records and registers must be kept on site and shall be available for inspection at all times.

- (a) A copy of the OHSA 1993 Construction Regulations 2003;
- (b) A copy of this Health and Safety Specification;
- (c) A copy of the Contractor's Health and Safety Plan (Regulation 4);
- (d) A copy of the Notification of Construction Work (Regulation 3);
- (e) A health and safety file in terms of Regulation 5(7) with inputs by the Construction Safety Officer (Regulation 6(7));
- (f) A copy of the risk assessment described in Regulation 7;
- (g) A full protection plan and the corresponding records of evaluation and training of employees working from elevated positions as described in Regulation 8;
- (h) Drawings pertaining to the design of structures (Regulation 9(3)) and formwork and support work structures (Regulation 10(d)) must be kept on site;
- (i) Pronouncement of the safety of excavations must be recorded in a register to be kept on site (Regulation 11(3)(h));
- (j) A copy of the certificate of the system design for suspended platforms (Regulation 15(3));
- (k) A notice must be affixed around the base towers of material hoists to indicate the maximum mass load, which may be carried at any one time by material hoists(Regulation 7(5));
- (l) Maintenance records of material hoists and inspection results must be kept in a record book to be kept on site (Regulation 17(8));
- (m) A record of any repairs to or maintenance of a batch plant must be kept on site (Regulations 18(9));
- (n) A warning notice must be displayed in a conspicuous manner when and wherever an explosive powered tool is used (Regulation 19(2));

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2



- (o) A register for recording of findings by the competent person appointed to inspect construction vehicles and mobile plant (Regulation 21(1)(j)).

## **E9. CONTRACTORS RESPONSIBILITIES**

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2003.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration.

The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2003, and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

### **(a) Contractor's position in relation to the Employer (Client) (Regulation 4)**

In accordance with Section 4 of the Regulations, the Contractor shall liaise closely with the Employer or the Engineer on behalf of the Employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

### **(b) The Principal Contractor and Contractor (Regulation 5)**

The Contractor is in terms of the definition in Regulation 2(b) the equivalent of Principle Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 5.

Any subcontractors employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall however provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2003.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

### **(c) Supervision of construction work (Regulation 6)**

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 6 and as set out in paragraph 7 above.

Appointment of those personnel and employees does not relieve the Contractor from any of the obligations under Regulation 6.

### **(d) Risk assessment (Regulation 7)**

The Contractor shall have the risk assessment made as set out in paragraph 7 above before commencement of the work and it must be available on site for inspection at all times. The Contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 7.

### **(h) Excavation work (Regulation 11)**

It is essential that the Contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The Contractor shall therefore ensure that all excavation work is carried out under the supervision of a competent person, that inspections are carried out by a Professional Engineer or Technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working conditions.

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 11 of the Construction Regulations.

### **(i) Demolition work (Regulation 12)**

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 12 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

### **(j) Tunnelling (Regulation 13)**

The Contractor shall comply with Regulation 13 wherever tunnelling of any kind is involved.

### **(m) Boatswain's chains (Regulation 16)**

Where boatswain's chains are required on the construction site, the Contractor shall comply with Regulation 16.

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Contractor

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Witness 1

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Employer

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Witness 1

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Witness2

#### **(n) Material Hoists (Regulation 17)**

Wherever applicable, the Contractor shall comply with the provisions of Regulation 17 to the letter.

#### **(o) Batch plants (Regulation 18)**

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 18. The Contractor shall ensure that the General Safety Regulations (Government Notice R1031 of 30 May 1986), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept onsite.

#### **(p) Explosive powered tools (Regulation 19)**

The Contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 19 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

#### **(r) Construction vehicles And mobile plant (Regulation 21)**

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. The vehicles and plant shall only be operated by workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 21.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

#### **(s) Electrical installation and machinery on construction sites (Regulation 22)**

The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 22.

#### **(t) Use of temporary storage of flammable liquids on construction sites (Regulation 23)**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

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The Contractor shall comply with the provisions of the General Safety Regulations (Government Notice R1031 of 30 May 1986) and all the provisions of Regulation 23 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

**(u) Water environments (Regulation 24)**

Where construction work is done over or in close proximity to water, the provisions of Regulation 24 shall apply.

**(v) Housekeeping on Construction sites (Regulation 25)**

Housekeeping on all construction sites shall be in accordance with the provisions of the environment Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 25 of the Construction Regulations.

**(w) Stacking and storage on construction sites (Regulation 26)**

The provisions for the stacking of articles contained in the General Safety Regulations (Government Notice R1031 of 30 May 1986) as well as all the provisions Regulation 26 of the Construction Regulations shall apply.

**(x) Fire precautions on construction sites (Regulation 27)**

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 27 of the Construction Regulations.

**(y) Construction welfare facilities (Regulation 28)**

The Contractor shall comply with the construction site provisions as in the Facilities Regulations (Government Notice R1593 of 12 August 1988) and the provisions of Regulation 28 of the Construction Regulations.

**(z) Non-compliance with the Construction Regulations 2003**

The foregoing is a summary of parts of the Construction Regulations applicable to all construction projects.

The Contractor, as employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations applicable to the contract under consideration are complied with to the letter.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Should the Contractor fail to comply with the provisions of the Regulations 3 to 28 as listed in Regulation 30, he will be guilty of an offence and will be liable, upon conviction, to the fines or imprisonment as set out in Regulation 30.

*The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.*

## **E10. MEASUREMENT AND PAYMENT**

### **10.1 Principles**

It is a condition of this contract that Contractors, who submit tenders for this contract, shall make provision in their tenders for the cost of all health and safety measures during the construction process. All associated activities and expenditure are deemed to be included in the Contractor's tendered rates and prices.

#### **(a) Safety personnel**

The Construction Supervisor, the Construction Safety Officer, Health and Safety Representatives, Health and Safety Committee and Competent Persons referred to in clauses 7.1 to 7.5 shall be members of the Contractor's personnel, and no additional payment will be made for the appointment of such safety personnel.

#### **(b) Records and Registers**

The keeping of health and safety-related records and registers as described in 8 is regarded as a normal duty of the Contractor for which no additional payment will be considered, and which is deemed to be included in the Contractor's tendered rates and prices.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness2

## C4: SITE INFORMATION

### C4.1 LOCALITY PLAN

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness2