PART C3: SCOPE OF WORKS

C3 Scope of Works C3.1

Portion 1: The Works C3.1 - C3...

Portion 2: Variations & additions to the standardized specifications for this contract and particular specifications for this project C3.16 - C3...

PART C3: SCOPE OF WORK AND PROJECT SPECIFICATIONS

SCOPE

This project specification is set out in two portions. Portion 1 covers a general description of the project, the facilities available and the requirements to be met. Portion 2 covers variations and additions to standardised or particular specifications that are applicable to the contract.

Each clause with the prefix PS shall refer to the congruent clause in the appropriate section of the standardised or particular specification. Such clause shall either substitute, or supplement, or amend the clause with the same number. Where there is no such congruent clause in the standardised or particular specification, the PS clause shall be a new clause in the project specification. Any clause that is referred to in the standardised specification will also include the appropriate project specification.

STATUS

In the event of any discrepancy between the project specifications and a part or parts of the SANS 1200 Standardized Specifications, the schedule of quantities or the drawings, the project specifications shall take precedence.

PORTION 1: THE WORKS

PS 1 GENERAL DESCRIPTION

The work to be carried out includes the upgrading and maintenance of one sports facility.

PS 2 DESCRIPTION OF SITE AND ACCESS

The sites are located within urban edge of Heidelberg and can be accessed via existing blacktop roads.

PS 3 NATURE OF GROUND AND SUBSOIL CONDITIONS

Tenderer to familiarize himself with ground conditions.

PS 4 DETAILS OF CONTRACT

The work to be carried out under this contract consists mainly of the following at the different specified locations:

- Two strip Cricket Concrete practice nets (including mats)
- Upgrade existing ablution facility;
- Boundary wall;
- Construction of rugby and soccer field with grass surface, subsoil drainage and irrigation system;
- Soccer and rugby combination poles;
- Netball court (x1);
- Appointing Sub-Contractors through tendering process;
- Managing of Sub-Contractors;
- Report on Sub-Contractors.

This description of the works is not necessarily complete and shall not limit the work to be carried out by the contractor under this contract.

Approximate quantities of each type of work are given in the schedule of quantities.

PS 5 CONSTRUCTION PROGRAMME

The Contractor shall submit his programme of work to the Employer's Agent not later than 14 days after the Contractor has been notified of the acceptance of his tender and only after discussions with the Employer's Agent. The Contractor shall furthermore carefully consider the expected wet weather conditions during winter and plan the work and working methods to limit any possible standing time or delay. The Due Completion date and any "float" must be indicated by the Contractor on the programme. Should the Due Completion date not be indicated, the Due Completion date, in the opinion of the Employer's Agent, shall be accepted as correct and binding. If necessary, the Employer's Agent may instruct the Contractor to adjust his programme to suit other activities.

The Contractor shall deliver the programme to the Employer's Agent's offices and shall include:

- 2 colour paper copies
- In electronic MS Project format.

The programme shall not be in the form of a bar chart only, but shall clearly show the anticipated quantities and value of work to be performed each week.

If, during the progress of the work, the quantities of work performed per week fall below those shown on the programme, or if the sequence of operations is altered, or if the programme is deviated from in any other way, the Contractor shall, within one week of being notified by the Employer's Agent, submit a revised programme.

If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the works within the time for completion as defined in clause 1.1.1.14 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by either providing more labour and equipment on site, or using the available labour and equipment in a more efficient manner.

Failure on the part of the contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the Employer's Agent to take steps as provided in clause 9.2 of the General Conditions of Contract.

The approval by the Employer's Agent of any programme shall have no contractual significance other than that the Employer's Agent will be satisfied if the work is carried out according to such programme and that the Contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the Employer's Agent to instruct the contractor to vary the programme should circumstances make this necessary. The Contractor is also referred to clause PS 8 when drawing up his programme.

The tenderer must make provision in his programme and tendered rates for the following constraints in working hours and working methods: (This list is not exhaustive and it is accepted that all other constraints were identified by the Contractor during the site inspection)

All wayleaves must be obtained prior to construction.

The Contractor must submit on a monthly basis a progress report consisting of a short report on the progress, project constraint implications (Time, cost, quality, risks, resources) and progress shall be indicated on the approved programme for each activity.

The progress report must be submitted 2 Days before site meetings and must accompany payment certificates to ensure the processing of payment.

PS 6 SITE FACILITIES AVAILABLE

PS 6.1 CAMP SITE

A specific site will be allocated to the Contractor for his construction camp and offices.

PS 6.2 WATER, ELECTRICITY AND SEWAGE

The contractor shall, at his own expense, be responsible for obtaining and distributing the water and electricity required for construction and domestic use. The distribution of water and electricity shall be carried out in accordance with the applicable laws and regulations.

Water 1

All water usage must be metered and reported at site meetings. The water supply is not guaranteed and no claims regarding insufficient supply of water will be considered. The contractor shall be held liable for any wastage of water due to negligence. Water usage will be charged for at the standard applicable tariff.

Electricity

Electricity is available in the vicinity of the site, which the Contractor may use at his own discretion. The Contractor must make the temporary connection and install a meter at his own expense at a point approved by the Employer's Agent. Electricity will be charged for at the standard applicable tariff.

The sufficiency or continuity of the electrical supply is not guaranteed under any circumstances and if the supply should fail or be insufficient the Contractor shall make his own arrangements to ensure sufficient supply. The Client will not be liable for any claims in this respect.

No separate payment will be made for the distribution and consumption of water and electricity, the cost of which will be deemed to be included in the tendered rates.

The Contractor must promptly provide the required services for the Employer's Agent not later than 21 days after the commencement date of the contract. In failing to do so, the Employer's Agent may arrange for these services directly. The cost of arranging, maintaining and providing of such facilities arranged by the Employer's Agent due to failure by the Contractor will be deducted from payments due to the Contractor.

The contractor shall pay a spot fine of R750 per service per occasion for failing to meter electricity and water consumption. The spot fine will be enforced by the Employer's Agent and will be deducted from payments due to the contractor. The fine is payable whether the contractor is obliged to pay for services or not.

Disposal of sewage

The Contractor shall at its own expense, be responsible for the safe and hygienic dealing with and disposing of all human excrement and similar matter generated on the Site during the course of the Contract, to the satisfaction of the responsible health authorities in the area of the Site and the Employer's Agent. All such excrement shall be removed from the Site and shall not be disposed of by the Contractor on the Site.

The Contractor shall further comply with any other requirements in this regard as may be stated in the Contract.

No separate payment will be made to the Contractor in respect of discharging its obligations in terms of this sub-clause and the costs thereof shall be deemed to be included within the Contractor's tendered Preliminary and General items.

See subclause PSA 4.2 regarding the sewage requirements.

PS 7 SITE FACILITIES REQUIRED

PS 7.1 Facilities for the Employer's Agent

No separate office for the Employer's Agent Representative is required but the contractor must provide a table, a chair and a plan cupboard in one of his offices for the exclusive use by the Employer's Agent Representative. The Employer's Agent Representative shall also be allowed the free use of the contractor's facilities.

The Employer's Agent Representative shall also be allowed the free use of the necessary survey equipment and survey assistants to enable him to carry out control work as and when required.

PS 7.2 Site instruction book

A triplicate book to be used for site instructions must be provided by the contractor and shall at all times be kept on the site.

PS 7.1 Facilities for the Employer's Agent

The Contractor shall provide on site, for the duration of the Contract and for the exclusive use of the Employer's Agent and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Employer's Agent to withhold payment of the Contractor's tendered Preliminary and General items until the facility has been provided or restored, as the case may be. Alternatively, if the facilities are not provided within 21 days of commencement of the contract the Employer's Agent may arrange for these services directly. The cost of arranging, maintaining and providing of such facilities arranged by the Employer's Agent due to failure by the Contractor will be deducted from payments due to the Contractor.

PS 7.1.1 Office Accommodation

The Contractor shall provide on site one office for the exclusive use of the Employer's Agent and the Employer's Agent Representative. Such office(s) shall comply with and be furnished in accordance with the requirements of Sub-clause 3.2 of SABS 1200AB. The Contractor shall maintain the office(s) in accordance with the requirements of Sub-clause 5.2 of SABS 1200AB. An air-conditioner (heating and cooling) low noise, air direction control, minimum 12000Btu must be provided in the office.

Such office accommodation shall be provided within the Contractor's site establishment facilities.

PS 7.1.2 Carports

The Contractor shall provide on site two carports 6m x 3m with an impermeable roof and wearing course for the exclusive use of the Employer's Agent and the Employer.

PS 7.1.3 Site Meeting Venue

The Contractor shall provide within its own site establishment facilities, a suitably furnished office or other venue capable of comfortably accommodating a minimum of TEN (10) persons at site meetings. The Employer's Agent shall be allowed free use of such venue for the conducting of any other meetings concerning the Contract at all reasonable times.

PS 7.1.4 Equipment and Assistants

Survey Equipment (a)

The Contractor shall, in accordance with the requirements of SABS 1200AB provide the following survey equipment for the exclusive use of the Employer's Agent and his staff:

- 1 No. upright reading automatic level with tripod;
- 1 No. metric levelling staff with protective cover bag;
- (iii) 6 No. ranging rods;
- (iv) 1 No. 100 meter "Stilon" tape measure;
- (v) 1 No. ± 2 kg hammer; and (vi) 1 No. 2 m DCP.

Whenever reasonably required by the Employer's Agent, the Contractor shall, in accordance with the requirements of SABS 1200AB, make available to the Employer's Agent or his representative, the following additional survey equipment:

- 1 No. Tacheometer (Theodolite) with tripod:
- 1 No. survey staff for tachyometer;
- (iii) 1 No. "Distomat", complete with tripod, fully charged battery and all appurtenant accessories.

(b) Survey Assistants

The Contractor shall, in accordance with the requirements of Sub-clause 5.5 of SABS 1200AB, make available to the Employer's Agent, TWO (2) survey assistants.

PS 7.1.5 Telephone facilities

The Contractor shall, for the duration of the Contract, provide the following telephone facilities as specified hereunder, for the exclusive use of the Employer's Agent and his staff:

Telkom Telephones

Subject to the availability of telephone lines, the Contractor shall, at its own cost, make all necessary arrangements with Telkom for the provision of a complete direct and independent telephone service, which is not connected to the Contractor's telephone exchange.

The Contractor shall advise Telkom promptly of any faults which develop in the telephone service and shall, in such circumstances, arrange for the earliest possible restoration of the said service.

The Contractor shall ensure that the telephone account is promptly paid. The Contractor shall, on production of an itemized statement, be reimbursed only the cost of the Employer's Agent's telephone calls.

(b) Cellular Telephones

In addition to a Telkom telephone, the Contractor shall provide one cellular telephone and associated service contracts from a reputable cellular service provider. The Contractor shall further insure the cellular phones against loss or damage from whatever cause arising, and shall ensure that all cellular phone accounts are promptly paid on the dates of payment. The Contractor shall further, at its own cost, ensure the prompt repair of all cellular phones provided under this clause, when reasonably required by the Employer's Agent.

The Contractor shall, on submission and approval of an itemized statement by the Employer's Agent, be reimbursed only the cost of the Employer's Agent's cellular telephone calls.

(c) Internet and Email

The Contractor shall provide for the duration of the contract (Time for Completion) a continuous internet connection and email access and a 5GB/month broadband data bundle with 3G modem.

PS 7.1.6 Computer Facilities

The contractor shall, for the duration of the Contract, provide the following computer equipment together with the software specified hereunder, for the exclusive use of the Employer's Agent and his staff:

- (a) 1 No. Computer;
- (b) 1 No. Printer.

The computer shall not be more than one year old and shall allow efficient alteration to drawings in CAD format

Printers shall, unless otherwise approved by the Employer's Agent, be Hewlett-Packard 600 Series DeskJet Printers or equivalent compatible.

All computer hardware shall be provided complete with the requisite connecting cables and all inter-facing devices and software necessary for its efficient operation as an integral system.

The following software shall be properly installed on the computer, and the original licence agreements and disks shall be provided to the Employer's Agent for safekeeping:

- (a) Microsoft Windows (Not more than 1 year old version)
- (b) MS-Office Professional." (Not more than 1 year old version)

All computer equipment provided shall be kept fully serviceable at all times by the Contractor. The Contractor shall have any defective equipment repaired or replaced at its own cost within 24 hours after notification by the Employer's Agent's staff.

The Contractor shall further provide at its own cost, all paper and black ink cartridges and other consumables reasonably required by the Employer's Agent.

PS 7.1.7 Telefax Facilities

The Contractor shall provide one plain paper fax machine for the exclusive use of the Employer's Agent and his staff.

The Contractor shall advise Telkom promptly of any faults which develop in the telephone line service for the fax machine and shall, in such circumstances, arrange for the earliest possible restoration of the said service.

The Contractor shall further provide at its own cost, all paper, ink cartridges, toner kits and other consumables required for the operation of the fax machine.

PS 7.1.8 Electricity Supply for the Employer's Agent

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

The Contractor shall be liable for and pay to the Employer's Agent on demand, all costs which the Employer's Agent may incur in the repair or replacement of any electrical equipment provided by the Employer's Agent on the Site. Reliance by the Contractor on the regulation of the electrical supply by the supplier or on current regulators fitted to generators shall not absolve the Contractor of its liabilities.

PS 7.1.9 Contract Name Boards

The Contractor shall provide, erect and maintain two contract name boards at such positions and locations as are directed by the Employer's Agent, which name boards shall, unless otherwise specified elsewhere in the Contract, comply with the recommendations for the standard board of the South African Association of Consulting Engineers, with regards to size, painting, decorating and detail, and the requirements described hereunder.

Each name board shall be made of tempered hardboard of thickness at least 12mm so braced on the reverse side as to prevent warping and be mounted on two or more, as necessary, firmly planted poles. The painting of the boards shall comply with the relevant requirements of CKS 193 and the colours of the paints shall be an acceptable match to the applicable colours given in SABS 1091.

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

PS 8 FEATURES REQUIRING SPECIAL ATTENTION

PS 8.1 ACCESS TO PROPERTIES

The Contractor shall organize the work in such a manner as to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work included in this contract.

The Contractor shall provide access to the public and to the property owners and maintain the necessary access for the duration of the contract.

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

The Contractor may, with the approval of the Employer's Agent, make arrangements with the occupiers of the affected erven and properties to close off a portion of a street, road, footpath or entrance temporarily, provided the contractor duly notifies the occupiers of the intended closure and its probable duration and shall, as punctually as possible, re-open the route at the prescribed time. Where possible, the road shall be made safe and re-opened to traffic overnight. Any such closure shall be made by arrangement between the Contractor and the occupiers and shall not absolve the Contractor from his obligations under the contract to provide access at all times. The Employer's Agent shall be informed of such arrangements prior to implementation and it shall be subject to the approval by the Employer's Agent. Barricades, traffic signs and drums shall be provided by the Contractor to suit the specific conditions.

Note: No payment items have been scheduled separately for any work required to ensure compliance with the above-mentioned. The Contractor must note that the rates and prices tendered shall be deemed to include full compensation for any additional work required to construct the works as specified and to maintain access, and that no extra payment will be made, nor will any claim for payment for these difficulties be considered.

The arrangements made between the affected parties and the Contractor shall be confirmed in writing by the Contractor and submitted to the Employer's Agent for written approval by the Employer's Agent.

PS 8.2 CONTRACTOR'S VEHICLES

All equipment and vehicles used by the contractor shall be roadworthy at all times and all drivers and operators shall be in possession of valid drivers' licenses.

PS 8.3 SITE MAINTENANCE

During the progress of the work and upon its completion, the site of the works shall be kept and left in a clean and orderly condition. The contractor shall at all times store materials and equipment for which he is responsible in an orderly manner, and shall keep the site free from debris and obstruction.

Public roads affected by construction activities, shall be cleaned on a daily basis by means of suitable and appropriate techniques and equipment. Due care and preventative measures must be taken by the Contractor to prevent material falling or accumulating on roads and any ingress of materials into the storm water system. No additional payment will be made for maintaining the roads and storm water system in a clean and acceptable condition. The Contractor shall be held liable for any costs incurred resulting from the Contractor not complying with this requirement and such costs shall be deducted from payments due to the Contractor.

PS 8.4 TESTING AND QUALITY CONTROL

PS 8.4.1 Contractor to Engage Services of an Independent Laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which tests are specified in, or reasonably to be inferred from the Contract, as to be taken into consideration by the Employer's Agent in deciding on whether the quality of materials utilised and workmanship achieved by the Contractor complies with the requirements of the specifications. The a

foregoing shall apply irrespective of whether the said testing is indicated in the specifications as to be carried out by the Employer's Agent or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified and arranging the test results in an orderly manner and indicating on a drawing the various test positions. The Contractor shall promptly provide the Employer's Agent with copies of the results of all such testing carried out by the independent laboratory.

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

PS 8.4.2 Additional testing required by the Employer's Agent

In addition to the provisions of Sub-clause PS 8.4.1, the Employer's Agent shall be entitled at times during the Contract, to require that the Contractor arrange with the independent laboratory, to carry out any such tests, additional to those described in Sub-clause PS 8.4.1, at such times and at such locations in the Works as the Employer's Agent shall prescribe. The Contractor shall promptly and without delay, arrange with the independent laboratory for the carrying out of all such additional testing as required by the Employer's Agent and copies of the test results shall be promptly provided to the Employer's Agent in an acceptable format and the test positions shall be indicated by the Contractor on a drawing.

PS 8.4.3 Cost of Testing and record keeping

The Contractor shall record all test results in tabular form in Excel which shall include a unique reference number, description of test, requirements/specified minimum, actual test result, date of test, position of test and Fail/Pass. Should a test indicate a failure the table shall include a reference to a further test of the rework indicating an acceptable test result (Pass).

The Contractor shall in addition on a continuous basis update a separate set of as built drawing(s) with all the test results. An updated table and drawing must be submitted the Employer's Agent on a monthly basis for approval. All actual test results shall also be submitted to the Employer's Agent (apart from the copy forwarded on receipt from the laboratory) with the unique reference number marked on the top right corner.

(a) Tests in Terms of Sub-clause 8.4.1

The costs of all testing carried out by the independent laboratory in accordance with the requirements of Sub-clause PS 8.4.1 above shall be born by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of Sub-clause PS 8.4.1.

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

Should the Contractor fail to timeously arrange or undertake the required test or fail to timeously present the test results and drawing with test positions, the Employer's Agent may proceed with arranging the testing and all costs related to the arrangement of the tests, the cost of testing and any other associated costs will be deducted from payments due to the Contractor.

(b) Additional Tests required by the Employer's Agent

The costs of any additional tests required by the Employer's Agent in terms of Sub-clause PS 8.4.2 shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Employer's Agent, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved is not in accordance with the specifications, shall not be reimbursable to the Contractor.

PS 8.5 SUB-CONTRACTORS

The Proposed Target for Local SMME Sub-Contracting will be 20% of the contract value (excluding P&G, Contingencies and Vat). The 20% represents both material and labour components. The main contractor will be responsible for all actions with regards to the execution of work by relevant local SMME Subcontractors. These actions should include the following but not be limited to:

Identify suitable portions of work;

Compilation of tender documents;

Advertising for potential subcontractors;

Evaluation and appointment of subcontractors;

Managing and payment of subcontractors;

Monthly financial reporting.

It is a requirement that the contractor must appoint a **local SMME Subcontractors**.

The contractor is only allowed to appoint a subcontractor outside the Hessequa district upon submission of substantive evidence proving the contrary i.e that no local subcontractor is capable of rendering the envisaged service.

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

The Employer's Agent will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising out of the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Employer's Agent will not become involved.

PS 8.6 EXISTING SERVICES

Before the Contractor commences operations, he must discuss with and have the approval of the Employer, authority or owner concerned regarding the method he proposes to use for relocating or safe-guarding any services and existing works he may encounter during construction.

The positions of existing services shown on the Drawings are given in good faith and no guarantee can be given that:

- (a) these services actually are in the approximate positions indicated.
- (b) that these are the only services in the vicinity, and
- (c) that the nature and description of these services are correct.

The Contractor shall be responsible to locate and safeguard <u>any</u> existing service or works he may encounter during construction and shall obtain clearance from the Employer, authority and the Employer's Agent before commencing work in the proximity of existing services or works.

The Contractor shall be responsible for any damage to such existing services and works in the execution of this contract and shall reimburse the Employer, authority or the owner concerned for any repairs required and for damages.

The Contractor shall be responsible for immediately notifying the Employer's Agent and the authorities concerned regarding any damage caused to public services and existing works.

Any alteration to public services shall be carried out by the Authority concerned unless the Contractor is instructed otherwise.

The Contractor shall provide the necessary assistance during any operations necessary in connection with the removal, alteration or safe-guarding of any public service.

PS 8.7 MONTHLY STATEMENTS AND PAYMENT CERTIFICATES

The statement to be submitted by the Contractor in terms of Clause 6.10 of the Conditions of Contract shall be prepared by the Contractor at its own cost, strictly in accordance with the standard payment certificate format prescribed by the Employer's Agent in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit TWO (2) A4 sized paper copies of the statement. The Contractor must submit the payment certificate in Excel or Bill format as instructed by the Employer's Agent. All supporting calculations of each quantity must be submitted with each payment certificate, sufficiently broken down into various portions of the work to enable the Employer's Agent to verify the quantities.

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

The Contractor shall, at its own cost, make the said adjustments to the statement and return to the Employer's Agent within THREE (3) normal working days from the date on which the Employer's Agent communicated to the Contractor the adjustments which requires, FIVE (5) sets of A4-sized paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Employer's Agent the requisite copies of the adjusted statement for the purposes of the Employer's Agent's payment certificate will be added to the times allowed in terms of Sub-clause 6.10.4 of the Conditions of Contract to the Employer's Agent for submission to the Employer and the Contractor of the signed payment certificate and to the period in which the Employer is required to make payment to the Contractor.

PS 8.8 ACCESS TO AND CONSTRUCTION IN RESTRICTED AREAS

Working space and access to working areas are sometimes restricted. The construction method used in these restricted areas and accessing these areas largely depends on the Contractor's Equipment. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties encountered by the Contractor while accessing and working in restricted areas. No extra payment nor any claim for payment due to these difficulties will be considered.

PS 8.9 DRAWINGS

The reduced drawings that form part of the tender documents shall be used for tender purposes only.

The Contractor will be supplied with 3 sets of paper prints to scale of each of the drawings required for construction purposes. These copies are issued free of charge and the Contractor shall make any additional copies he may require at his own cost.

PS 8.9.1 Figured dimensions to be used

The Contractor shall use only the dimensions stated in figures on the drawings in setting out the Works and dimensions shall not be scaled from the Drawings, unless required by the Employer's Agent. The Employer's Agent will, on the request of the Contractor in accordance with the provisions of clause 5.9 of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

PS 8.9.2 Drawings and As-Built / Record Drawings

The Contractor shall ensure that accurate as-built records and drawings are kept of all infrastructure installed, crossed, discovered or relocated during the contract. The position of pipe bends, junction boxes, duct ends and all other underground infrastructure shall be given by either co-ordinates, or stake value and offset. Levels of all services shall also be given. In addition the levels, coordinates, direction, size and type of existing services crossed or exposed must be recorded by the Contractor and be indicated on the as-built drawings. A marked-up set of drawings shall also be kept and updated by the Contractor on at least a weekly basis. This information shall be supplied to the Employer's Agent Representative on a regular basis in accordance with the Employer's Agent's requirements. Electrical services shall be indicated in red, water pipes in blue, sewers in green, storm water services in brown, Telkom services in orange, etc.

Any information in the possession of the Contractor, which the Employer's Agent requires to complete the record drawings shall be supplied to the Employer's Agent Representative before a <u>Certificate of Practical Completion</u> will be issued.

Should the Contractor fail to provide the information timeously, the Employer's Agent may arrange for additional surveys, exploratory holes, marking up of drawings, etc. to obtain and record the necessary information. All costs to obtain and record the information will be deducted from payments due to the Contractor.

PS 9 INFORMATION SUPPLIED BY THE EMPLOYER

Certain information contained in these contract documents, or provided separately, is being offered in good faith. However, in the circumstances pertaining to the type of information supplied, no guarantee can be given that all the information is necessarily correct or representative. More specifically this applies to all material surveys and reports and similar information, the accuracy of which is necessarily subject to the limitation of testing, sampling, the natural variation of material or formations being investigated and the measure of confidence with which conclusions can be drawn from any investigations carried out. It also applies to the positions of existing services as indicated on the drawings.

The employer accepts no liability for the correctness or otherwise of the information supplied or for any resulting damages, whether direct or consequential, should it prove during the course of the contract that the information supplied is either incorrect or not representative. Any reliance placed by the tenderer on this information shall be at his own risk.

PS 10 SPOIL MATERIAL

No indiscriminate spoiling of material will be allowed. All surplus material shall be spoiled at a site provided by the contractor, unless specifically scheduled otherwise in the schedule of quantities.

PS 11 NON-WORKING DAYS

The contractor shall not work on Sundays or on the following statutory Public Holidays: New Year's Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers' Day, Youth Day, National Women's' Day, Heritage Day, Day of Reconciliation, Christmas Day and Day of Goodwill.

PS 12 SAMPLES

The contractor shall at his own cost, supply all samples that may be required. Material or work not conforming to the approved samples shall be rejected. The Employer's Agent reserves to himself the right to submit samples to any tests to ensure that the material represented by the sample conforms to the requirements of the specifications.

PS 13 MANUFACTURER'S INSTRUCTIONS

The recommendations of the manufacturers of patented materials must be strictly adhered to regarding the use, mixing, application, fastening, etc. thereof except when otherwise instructed in writing by the Employer's Agent.

PS 14 PROPRIETARY MATERIALS

Where proprietary materials are specified it is to indicate the quality or type of materials or articles required, and where the terms "or other approved" or "or approved equivalent" are used in connection with proprietary materials or articles, it is to be understood that the approval shall be at the sole discretion of the Employer's Agent.

PS 15 NOTICES, SIGNS, BARRICADES AND ADVERTISEMENTS

The contractor shall erect the necessary signs, notices and barricades for the duration of the contract in order to safeguard both the works and the public.

Notices, signs and barricades as well as advertisements may be used only upon approval by the Employer's Agent, and the contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Employer's Agent shall have the right to have any sign, notice or advertisement moved to another position or to have it removed from the site of the works, should it in any way prove to be unsatisfactory, inconvenient or dangerous to the general public.

Such notices, signs and barricades shall be provided and erected at the contractor's own expense. The standard name board of the South African Association of Consulting Engineers is specified, the cost of which shall be included in the rates tendered for items PSA 8.3.1 and 8.3.2 under section 1200 A of the schedule of quantities.

PS 16 SETTING OUT OF WORK

Reference and level beacons will be shown to the Contractor by the Employer's Agent at the commencement of the Contract and the Contractor will be responsible for transferring the date to the Site of Works.

The Contractor shall check the condition and accuracy of all reference and level beacons and satisfy himself that they have not been disturbed and are true with regard to position and level. A beacon that has been disturbed shall not be used until its true position and level have been re-established and the new values have been certified by the Employer's Agent. The Contractor shall thereafter be held entirely responsible for the protection of all reference and level beacons.

The Contractor shall employ a capable surveyor to set out the Works to the required lines and levels. The Employer's Agent shall be informed immediately should any discrepancy be discovered between the levels or dimensions obtained by the Contractor and those shown on the drawings.

Where a beacon is likely to be disturbed during construction operations, the Contractor shall establish suitable reference beacons at locations where they will not be disturbed during construction. No beacons shall be covered over, disturbed or destroyed before accurate reference beacons have been established and details of the positions and levels of such beacons have been submitted to the Employer's Agent. The Contractor's reference beacons shall be of at least the same accuracy and sturdiness of construction as the existing beacons.

The Contractor shall submit the method of setting out he proposes to employ to the Employer's Agent. Accurate control off-line and level shall be provided by the Contractor at all stages of construction.

Work set out by the Contractor may be checked by the Employer's Agent and any errors found shall be rectified by the Contractor at his own expense. The Contractor shall supply any instrument, equipment, material and labour required by the Employer's Agent for this survey work. Any assistance, including checking given to the Contractor by the Employer's Agent or any setting out done by the Employer's Agent for Contractor shall not be held as relieving the Contractor of his responsibility for the accurate construction of the Works.

The Contractor's survey instruments and survey equipment shall be suitable for the accurate setting out of the Works and shall be subject to the approval of the Employer's Agent. They shall furthermore be checked and correctly adjusted by the authorized agents before the commencement of the contract and subsequently when required by the Employer's Agent and when otherwise necessary.

When required the Contractor shall, at his own expense, provide one labourer to assist the Employer's Agent. The Employer's Agent shall have the sole right of approving of such a labourer.

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

The contractor must verify with the Employer's Agent prior to construction whether the coordinates shown on the drawings have reference to the Clarke 1880 or WGS 84 system.

PS 17 CONTROL OF NOISE AND DUST

All noise and dust to be kept to the lowest level possible.

PS 18 SOURCE OF CONSTRUCTION MATERIAL

The location and procurement of all imported material will be the responsibility of the Contractor. Rates tendered for all imported material shall include haulage. All manufactured materials shall carry the SABS mark.

PS 19 FREEHAUL

All tendered rates shall allow for all transport costs. The free haul distance for the purpose of this Contract will be unlimited unless otherwise indicated in the schedule of quantities.

PS 20 DRAINAGE OF EXCAVATIONS AND TRENCHES AND PLANNING OF SUCH ACTIVITIES

The Contractor is responsible for the drainage of excavations and trenches and shall therefore provide, work and maintain the pumps and other plant required for this purpose. Drainage of trenches and excavations will not be measured and paid for separately and the cost thereof will be deemed to be covered by the prices tendered and paid for the various items of work included under this contract.

During the wet winter months, the extent of open trenches shall be limited to reduce the risk of any delays. The Contractor shall be responsible for planning the work accordingly.

The Contractor shall amend his preferred working method by for example opening up and immediately closing up of trenches once the short section of pipe is laid to prevent any material from becoming unsuitable or saturated.

Indiscriminate working methods, lack of proper planning and protection of the works during the winter months resulting in a delay shall not be considered a circumstance, event or act on which a claim may be based and such claim shall not be payable by the Employer.

No additional payment will be made for altering the working method.

PS 21 SAFETY OF TRENCHES

The strutting and shoring of excavated faces, if necessary, will be the responsibility of the Contractor and will not be measured and paid for separately. The Contractor, however, will be responsible to maintain and to keep all excavated faces in a safe condition to protect the Works and workers and to prevent delays caused by slope failures.

No trenches may be left open during the Contractor's holiday during December and January. All trenches which have been excavated but which have not been finally backfilled and compacted at the commencement of the said holiday period shall be temporarily fully backfilled and compacted to a standard which will:

- (a) prevent damage occurring to the trenches or any other part of the Works;
- (b) prevent damage to or physical loss of the property of any person;
- (c) eliminate the risk of injury to any person;

during the said period.

All costs involved in the temporary backfilling and compaction of such trenches and the subsequent reopening of the trenches after the holiday period shall be for the Contractor's account.

PS 22 REPORTING REQUIREMENTS

The Contractor shall promptly submit the schedules and reports at Contract stage as requested by Employer's Agent. Updated reports must be submitted to the Employer's Agent two days before site meetings. Should the Contractor fail to provide the necessary documentation, the Employer's Agent may proceed to compile such documentation which costs will be deducted from payments due to the contractor.

- Bar chart or sloping bar chart schedule showing staff requirements by time interval and reflecting work
 planned by time interval.
- A monthly report showing planned progress versus actual progress giving details of how the Work will be completed in relation to the schedule.
- Daily major construction equipment report
- Daily staff report by crafts
- Procurement schedule for the procurement and receipt of materials, equipment and subcontract services by Contract and a monthly status report of all such materials and equipment
- MIG forms (approximately 5 pages) including employment details, expenditure and programme.

PS 23 TRANSPORT OF MATERIAL

All costs of transporting material, including overhaul, shall be included in the applicable tendered rates. All references in the specifications to transport, overhaul and haul distances shall be deleted irrespective of whether or not the deletion is included in these project specifications.

PS 24 EMPLOYMENT OF LOCAL LABOUR

It is the intention that the project, of which this contract is a part, should make the maximum possible use of the local labour force which is at present under employed.

To this end the contractor is expected to limit non-local employees to key personnel only and to employ local labour on this contract.

The contractor shall fill in Schedule T2.2.11: Schedule of Estimated Local Labour to be Employed on the Contract and state how many non-local key personnel he intends to employ in the various categories. The tenderer must also state on this form the number of local labourers he intends employing for this contract.

The numbers stated in the above-mentioned data sheet will be strictly controlled during the contract period and any increase in numbers shall be subject to the approval of the employer.

The workforce utilized on the contract is to comprise only of local workers within the area of the jurisdiction of the client i.e. within municipal boundaries. The Employer's Agent may, at his discretion, upon receipt of a written and fully motivated application from the contractor and where he deems the circumstances so warrant, authorize in writing that non-local temporary works, not being his Key Personnel, be included in the workforce.

The contractor shall pay to all temporary workers engaged in terms of this clause, not less than the minimum rate of remuneration as specified in the Appendix to Tender.

The contractor must provide records of all labour employed including name, surname and ID number, differentiating between male, female, local or non-local key personnel, youth and handicapped on a monthly basis. This record must also indicate the total number of man-hours and total remuneration of labour. Monthly payment certificates will only be processed if they are accompanied by the completed reports.

All costs, relating to identification, acquisition, allocation, training, relieving labour of their duties, problem-solving and attending to any other matters in order that the employment of local labour proceeds smoothly, shall be <u>included</u> in the relevant rates.

PS 25 COMMUNITY LIAISON AND COMMUNITY RELATIONS

In all dealings with the community and works employed from within the community, the contractor shall take due cognizance of the character, culture and circumstances of the community involved and shall at all time use his best endeavours to avoid the development of disputes and to foster a spirit of cooperation and harmony towards the project.

The contractor shall at all times, keep the Employer's Agent fully informed on all matters affecting the contractor and the community, and shall attend all community meetings relating to the project as may be reasonably required by the Employer's Agent. All matters concerning the community shall be discussed and where possible, resolved at such meetings.

Where any resolution of a community meeting shall be contrary to the terms and provisions of the Contract, the contractor shall not give effect there-to without a prior written instruction from the Employer's Agent. Where the contractor is of the opinion that any instruction of the Employer's Agent issued in terms of this clause will result in the incurring of additional costs which were not provided for in his tendered rated and/or that a delay in the progress of the works will result, he shall be entitled to submit a claim in terms of Clause 10.1 of the Conditions of Contract, provided always that the period of twenty-eight (28) days referred to in Clause 10.1.1.1 shall be reduced to five (5) normal working days in respect of all claims submitted in terms of this clause.

PS 26 SECURITY CONTROL

The Contractor will be responsible for the safety and security of his personnel and the site in general all times. All laws, rules and regulations shall be strictly followed in this regard and all the necessary precautions and measures shall be taken to ensure the safety of personnel, the public and equipment. The safeguarding of excavations in particular shall be a priority.

The Contractor shall provide security watchmen for this contract, as he deems fit at no extra cost for the Employer.

PS 27 TESTING OF WATER PIPES OR SEWERS

The Contractor shall carry out all control testing of materials and workmanship. The Employer's Agent must be notified well in advance of all final tests to be undertaken. No portion of pipe may be finally covered before the proper prescribed tests have been done and approved in writing by the Employer's Agent.

All test results must be tabulated and test sections described properly by the Contractor and must be submitted timeously by the Contractor. All tests positions and pipe sections tested shall be indicated on a drawing provided by the Contractor.

PS 28 MATERIALS OFF SITE

Should the Contractor claim payment of a portion of the value of some or all of the pipes, valves or any other material held in off-site stores the items concerned must be clearly marked as the property of the Employer. A certificate to this effect and confirmation that the relevant items have been paid for shall accompany his claim detailing the items and serial numbers as well as the street address of the store where the plant and

equipment have been insured in terms of the general Conditions of Contract. The Contractor shall in writing provide documentary proof from the insurance company that these items are fully covered by the insurance policy concerned while the plant and equipment are stored away from the Site (street address of store to be stated).

PS 29 PHOTOGRAPHS

The Employer, Employer's Agent and any of their agents shall at all times be allowed to photograph or film (video) any activities on site and the use of such shall be unlimited.