L I G Landfill Interest Group

Disposal Treatment Utilisation Management

Specialist interest group within the
Institute of Waste Management of Southern Africa (IWMSA)
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Institute of Waste Management of Southern Africa

TENDERING PROCEDURES

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Tendering procedures

1. Choose appropriate tender format
    1. GCC (CESA)
    2. NEC PSC
    3. NEC ECC
    4. FIDIC
    5. Treasury
    6. CIDB

Things to consider when choosing documentation include but are not limited to the type of work, the size of the projects, the type of client (private, parastatal, government) and the type of contractor (BBBEE, SMME, Large e.g WBHO)

Tender Data

- Required CIDB rating

When evaluating a tender the CIDB gives the engineer, employer, project manager a good indication of the type of work the contractor is capable of, therefore when targeting contractors, this is a good way of ensuring that only qualified contractors tender.

- Tender validity

For certain clients the procurement process may be quite cumbersome and therefore one may want to extend the tender validity in order to avoid expiry.

- Clarification meeting

For projects that are more technical in nature and where the engineer may feel that a site visit or a clarification meeting is required such meetings can be made compulsory for tenderers to ensure that tenderers tender on the same information. Often these meetings also assist the engineer to clarify any questions that tenderers may have.

- Returnable schedules & Preferential Procurement

The engineer is not in position to ask specific contractors for information and not afford other contractors the same opportunity and therefor it is important for the engineer to have all the relevant information to evaluate a tender from the outset. The returnable schedules are used to get all the relevant information from tenderers in the tender documentation submitted with the price. Where preference will be given for BBBEE or CIDB level etc. this documentation is supplied in the returnable schedules.

Contract Data

- General Conditions of Contract

This is the form of contract that all involved, client, contractor, subcontractors and consultant work under and their interactions and responsibilities. The GCC would also outline procedures for e.g. Exchange rate adjustments, Contract Price adjustment , penalties etc..

- Documentation required prior to commencement

The GCC would specify certain requirements before the contractor may commence work, these may include:

  - Guarantees
  - Insurance
  - Letters of good standing from necessary authorities (Dept. of manpower)
  - Health and Safety Plan in terms of OHS Act (Act 85 of 1993)
  - Competency certificates for specialist workers

- Bills of quantity

The BOQ is normally split into schedules of items that are linked i.e.:

  - Preliminary and General items Prime Cost and Provisional Sums (Site Establishment)
  - Bulk earthworks: sub-base, base
  - Lining material: clay layers, leakage detection layers, liner protection layers, reinforcing grids
  - Surface treatment: stormwater, leachate treatment, access, weigh bridges etc.

Bills of Quantity

- Normally a BOQ consists of a table with the following items

Item No	Description	Unit	Qty	Rate	Amount
C 1.7.1	Joint type 1: Between horizontal ands sloping floor panels, concrete member 20mm think, joint sealer one side No rearguard.	m	300	300.00	90 000.00

This refers to Item C1.7.1 in the BOQ, the unit is “running meters” and the designer estimated a length of 300m is required. The contractor will charge R300/m and therefore the price is R90 000.00.
Please note that most contracts are re-measurable and the contractor will only get paid for the actual quantity of work in this instance jointing.

Project Specification

Normally all civil construction is done according to the SANS 1200 standard. However where the designer wants to change the regular standard or in the absence op a specific standard, they would write a particular specification and that will be contained in the Project Spec.

For Instance , the SANS 1200 may not have sufficient information to install a Geomembrane then the project spec may include:

Geomembrane Installation

- **PS1.7.1 Earthworks**
- The *Contractor* shall be responsible for preparing and maintaining the layers in a condition suitable for the installation of the geomembrane liner.
- The layers shall be free of any sharp stones greater than 5mm and shall be finished to a level standard such that no step greater than 10mm, nor a gap greater than 20mm, can be measured beneath a 3m straightedge, particularly at construction joints.
- **PS1.7.2 Surface Acceptance**
- Immediately prior to the placement of the geomembrane liner, the surface shall be moistened and swept clean by the *Contractor*. The installer shall provide the *Contractor* with a written acceptance of the surface to be lined. Subsequent changes or repairs to the subgrade and the surface shall remain the responsibility of the *Contractor*.

Testing

Quality assurance is an important part of the documentation and testing is the most effective way to ensure that a contractor meets the requirements of the specification. Testing is normally done on a gateway system whereby a contractor has to prove a result before the next phase may commence. For instance:

The insitu base preparation layer must be compacted to 95% Mod AASHTO before a sub-base layer may be added.

The thermal welds on the HDPE liner must be pressure tested before the next liner is installed.

NB. IT IS IMPOSSIBLE TO MEASURE OR TEST QUALITY INTO ANY PRODUCT OR INSTALLATION AND THEREFORE A PROPER QUALITY ASSURANCE SYSTEM MUST BE IMPLEMENTED TO ENSURE THAT TESTING ONLY CONFIRMS THE PROPER CONSTRUCTION AND INSTALLATION METHODS

Drawings

- There are various types of drawings that are used during a contract and the ones that go out with the tender are marked as FOR TENDER PURPOSES, during the tender phase additional drawings may be issued for information ad these will be marked as **FOR INFORMATION ONLY**.
- Once the contract is awarded the contractor will be issued with a set of drawings marked **FOR CONSTRUCTION.**
  - Drawings must be checked , reviewed and signed before being issued
  - Drawings must have revision status and be numbered as such
  - When drawings are superseded they must be marked as such in order that the drawings are not used but must be kept for record purposes
  - It is also important to specify and price for as built drawings in order that the client has an accurate record of the installation.