



Compiler guidance note

Component document: C3 - Scope of work

Function and broad outline of contents

Specifies and describes the supplies, services, or engineering and construction works which are to be provided and any other requirements and constraints relating to the manner in which the contract work is to be performed.

Notes

The Standard for Uniformity in Construction Procurement (see clause 4.4.7) requires that the scope of work shall, wherever possible be:

- a) *described in terms of performance rather than the design or descriptive characteristics, and*
- b) *based on national or international standards, where such exist.*

Clause 4.4.7 furthermore requires that:

Requirements in the form of specifications, plans, drawings, designs, testing and test methods, packaging, marking or labeling or conformity certification shall not create trade barriers. Reference to any particular trademark, name, patent, design, type, specific origin or producer shall not be made, unless there is no other sufficiently precise or intelligible way of describing the characteristics of the work. Such reference shall be accompanied by the words "or equivalent".

The Standard requires that where quality is addressed in the scope of work (see sub-clause 4.3), it may be done so by:

- a) *specifying the requirements fully and unambiguously; or*
- b) *requiring tenderers to submit plans for monitoring and applying quality management principles in the performance of their contracts;*

The standard furthermore requires that where it is desirable that an employer and a contractor jointly select a subcontractor, the manner in which this is to be done shall be described in the Scope of Work in accordance with the provisions of Annex I i.e.

Scope of mandatory subcontract works

The following portions of the works shall be subcontracted in accordance with the subcontracting procedures described in this scope of work:

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Subcontracting procedures

Competitive tenders shall be invited in respect of each portion of the works that must be subcontracted in terms of the contract in accordance with the relevant provisions of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the(*insert title of standard form of subcontract that is to be used*), with minimal project specific variations and amendments that do not change their intended usage.

The Employer together with the Contractor shall evaluate the tenders received in accordance with the provisions of the Standard Conditions of Tender contained in Annex F of Standard for Uniformity in Construction Procurement.. The evaluation panel shall comprise equal representatives from the Employer and from the Contractor.

The Contractor shall without delay enter into contract with the successful tendering subcontractor based on their accepted tender submission

The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

Commentary

1 General

- 1.1 The scope of work should identify the supplies, services, or engineering and construction works which are to be provided during the contract and establish requirements and constraints relating to the manner in which the contract is to be performed. The scope of work as such should provide sufficient information to enable tenderers to price and plan the requirements for the contract to satisfy the employer's requirements and expectations in the performance of the contract.
- 1.2 The requirements for the scope of work to be described in terms of performance rather than the design of descriptive characteristics and to be based on national or international standards, where such exist, is in accordance with international best practice and aligns with South Africa's undertakings to the World Trade Organisation regarding technical barriers to trade. It should be noted that recently published Supply Chain Management Regulations issued in terms of the Municipal Finance Management Act, 2003, require that specifications:
- (a) *must be drafted in an unbiased manner to allow all potential suppliers to offer their goods and services;*
 - (b) *must take account of any accepted standards such as those issued by Standards South Africa, the International Standards Organisation, or an authority accredited or recognized by the South African, or an authority accredited or recognized by the South African National Accreditation System, with which the equipment or material or workmanship should comply;*
 - (c) *where possible, be described in terms of performance required rather than in terms of descriptive characteristics for design;*
 - (d) *may not create trade barriers in contract requirements in the forms of specifications, plans, drawings, designs, testing and test methods, packaging, marking or labeling or conformity certification;*
 - (e) *may not make reference to any particular trade mark, name, patent, design, type, specific origin or producer unless there is no other sufficiently precise or intelligible way of describing the characteristics of the work, in which case such reference must be accompanied by the words equivalent".*
- 1.3 Quality measures must not promote captive markets and should result in quality that is appropriate to comply with user requirements as opposed to the best quality available.
- 1.4 The scope of work should describe the state of the delivered supplies or completed services / works (i.e. what is to be left behind after the contract) and any constraints on how the contract is to be executed after the award of the contract.
- 1.5 The content of the scope of work will differ between categories of contract, i.e. between supplies, services and engineering and construction works and will vary significantly from contract to contract.

2 Supplies contracts

- 2.1 The scope of work should include information on items such as:
- a) description of the supplies to be supplied / scope of the contract,
 - b) applicable standards,
 - c) variations to standardized specifications, and
 - d) information pertaining to issues such as
 - 1) specific requirements,
 - 2) place of delivery, and
 - 3) time for placing of orders and rate of delivery.
- 2.2 The topics tabulated in Table 1 are recommended for inclusion in the scope of work of supplies contracts. The topics should serve as a checklist for those compiling the scope of work to ensure that all requirements are stated.

Table 1: Topics which should be considered in the development of the scope of works for supplies contracts

Topic	Commentary
Employer's / purchaser's objectives	Describe the employer's / purchaser's objectives for the supplies as delivered.
Overview of the required supplies	Provide a short description of the supplies.
Extent of the supplies	Provide a brief outline of the quantity, duration and nature of the supplies.
Applicable national and international standards	List all applicable national, regional and international standards and all values pertaining to specific attributes relating thereto.
Particular/Generic specifications	Include or make reference to particular (purpose written for the project) or generic (standard specifications of the procuring department) specifications that are applicable to the supplies.
Specific requirements	State specific requirements, as necessary.
Delivery	Provide delivery details including information such as: - specific delivery requirements; - place of delivery; and - time for placing of orders and rate of delivery.
Certification by recognized bodies	State which institutions may certify acceptability of items.
Quality plans and control	State requirements for quality plans and when they are to be provided. State requirements for quality control, samples of items, etc.
Procurement	State requirements appropriate to the methodology and procedures that are to be followed. Make reference to Preference Schedules, if any. State the number, title, part and edition of SANS 1914 targeted procurement standards applicable to the contract and all data, variations and definitions required e.g. definitions of target groups, weighting factors, etc. (Refer to SANS 10396 for specific guidance.)
Format of communications	State formats of different types of communications (e.g. orders) and attach pro formas of such documents, to the end of the Scope of Work.
Forms for contract administration	State requirements, if any, for use of standard forms for contract administration purposes and attach pro formas of such documents, to the end of the Scope of Work.
Electronic payments	State details required / procedures to obtain electronic payments, as relevant.
Bonds and guarantees	State number of copies and the place where bonds and guarantees are to be lodged. State the place where bonds and guarantees can be collected when they are released in accordance with the contract.
Payment certificates	State requirements for substantiation of claims in payment certificates to expedite verification and certification by employer's representative.
Insurance provided by the employer / supplier	State where copies of insurance effected by the employer / supplier may be obtained.
Health and safety requirements and procedures	Establish health and safety requirements and make reference to health and safety specifications, any contract between the contractor and employer, schedules, etc.. Also state when such documents are to be submitted to the employer's representative. Attach pro formas of such documents to the end of the Scope of Work.
Annexes (List by title)	Attach data sheets, completed returnable schedules, pro forma documents, particular specifications, drawings, sketches, etc. that are referred to in this document.

3 Engineering and construction works contracts

3.1 The scope of work for engineering and construction works is largely dependent upon the contracting strategy that is adopted by the employer, but should generally include information on items such as

- a) description of the works,
- b) design brief including design data performance requirements, if applicable,
- c) applicable standards:
 - 1) construction and management requirements for works contracts
 - 2) targeted procurement
 - 3) construction works
 - 4) materials standards
 - 5) particular specifications
 - 6) specification data (contract specific provisions and variations to the standardized specifications),
 - 7) list of employer's drawings, and
 - 8) information relating to existing services, site establishment.

3.2 The content of the scope of works is to a large extent dependent upon the contracting strategy that is adopted, for example traditional pre-planned, design and builds, develops and construct, etc.

3.3 The topics tabulated in Table 2 are recommended for inclusion in the scope of work of supplies contracts. The topics should serve as a checklist for those compiling the scope of work to ensure that all requirements are stated.

Table 1: Topics which should be considered in the development of the scope of works for supplies contracts

TOPIC	ASPECT	COMMENTARY
DESCRIPTION OF THE WORKS		
Employer's objectives	-	Describe the employer's objectives for the delivered end product or the project.
Overview of the works	-	Provide a short description of the works, its purpose, etc, including all necessary temporary works in addition to those designed by the employer.
Extent of the works	-	Provide a brief outline of the scope of works. Ensure that all operations, particularly those requiring special attention, are listed.
Location of the works	-	State the place where the works are to be provided and provide numbers of drawings that describe its location.
Temporary works	-	Briefly describe the temporary works, as relevant, i.e. what they are and where they are located, and how they are to be dealt with upon completion.
ENGINEERING		
Design services and activity matrix	-	Identify responsibilities for design and related documentation: Example <i>Works designed by, per design stage:</i> <i>Concept, feasibility and overall process Employer</i> <i>Basic engineering and detail layouts to tender stage Employer</i> <i>Final design to approved for construction stage Employer</i> <i>Temporary works Contractor</i> <i>Preparation of as built drawings Contractor</i>
Employer's design	-	Describe the extent of the employer's design, if any.
Design brief	-	Where the contractor is responsible for the design, provide a comprehensive design brief which includes employer preferences, examples of requirements and mandatory requirements, all constraints including size and space limitations and performance standards that set out both user and technical requirements in general terms, the levels of required performance for all attributes and the means by which compliance can be evaluated.
Drawings	-	State requirements for drawings to be prepared by contractor and list all drawings prepared by the employer.
Design procedures	-	Establish design procedures where the contractor is responsible for the design which as a minimum sets out: <ul style="list-style-type: none"> - interfaces with existing structures, plant etc; - any temporary works requirements, if any, e.g. specialized items of equipment; - design integration before and during construction; - procedures for all necessary approvals; - special procedures e.g. environmental; - design change procedures; and - record keeping and tracking of documents.
PROCUREMENT		
Preferential procurement procedures	Requirements	State requirements appropriate to the methodology and procedures which are to be followed. (See Annex A of SANS 10396) Make reference to Preference Schedules, if any.
	Resource standard pertaining to targeted procurement	State the number, title, part, and edition of SANS 1914 targeted procurement applicable to the contract and all data, variations and definitions required e.g. definitions of target groups, weighting factors, etc. (Refer to SANS 10396 for specific guidance)
Subcontracting	Scope of mandatory subcontract works	Describe work which the contractor is to subcontract to nominated, selected or specialist subcontractors.
	Preferred subcontractors / suppliers	List approved domestic subcontractors and suppliers, as necessary.
	Subcontracting procedures	State specific procedures relating to the selection and appointment of subcontractors including requirements for subcontract documents, as necessary.
	Attendance on subcontractors	State requirements for attendance on nominated and other subcontractors.

CONSTRUCTION		
Works specifications	Applicable SANS 2001 standards	State the number, title, part and edition of the SANS 2001 standard(s) for construction works applicable to the contract and all associated specification data (refer to annex A of each specification for specific guidance).
	Applicable national and international standards	List all applicable national and international standards and all values pertaining to specific attributes relating thereto.
	Particular / generic specifications	Include or make reference to particular (purpose written for the project or specifications of the contracting authority) which are applicable to the works: Such specifications should be drafted such that they: - contain acceptance procedures to enable compliance to be determined; - specify requirements uniquely and unambiguously; - set out requirements for items by describing both their physical and functional characteristics in a comprehensive manner; - state what is to be provided and not how it is to be provided. Such specifications should not contain particulars relating to measurement and payment, i.e. matters pertaining to the Pricing Data.
	Certification by recognized bodies	State which institutions may certify items for inclusion in the works and building systems e.g. Agrément Board of South Africa.
	Agrément certificates	State requirements for the use of alternative materials, which are the subject of an Agrément certificate, requirements for providing Agrément certificates (see www.agrement.co.za.)
Plant and materials	Plant and materials supplied by the employer	Provide details of all plant "free issue" and materials and state procedures associated therewith.
	Materials, samples and shop drawings	State requirements for proof of compliance with materials specifications, samples of materials and finishes, shop drawings required to amplify the designs of aspects of the works, use of proprietary materials, etc.
Construction equipment	Requirements for equipment	State minimum requirements for equipment as necessary.
	Equipment provided by the employer	Provide details of equipment made available for use by the contractor and set out conditions relating thereto.
Existing services	Known services	Describe known services making reference to drawings containing known services and state requirements for locating, marking and recording such services.
	Treatment of existing services	State requirements for the treatment of existing services i.e. their termination, diversion or continued use, either temporarily or permanently, and set out the procedures relating thereto.
	Use of detection equipment for the location of underground services.	State requirements, as necessary, for the use and availability of detection equipment for the location of underground services.
	Damage to services	State responsibility for damage to services, known and unknown, and requirements for working in close proximity to services etc.
	Reinstatement of services and structures damaged during construction	State requirements and reinstatement procedures for the notification and repair of damage to services, penalties applicable to the damage of services, etc.
Site establishment	Services and facilities provided by the employer	State the facilities and the services which are to be provided by the employer subject to the contractor accepting that the employer is unable to guarantee they will be available at all times and always in the form or location stated: -water: location, quality, approximate pressure, source, etc -electricity: location, phase, source, etc -telecommunication services: location of lines, etc -ablution facilities: nature and location -accommodation: nature and location -medical / first aid facilities: nature and location -fire protection services: nature and location -other: describe as appropriate. State requirements, as necessary, for the contractor to: -hook up to, and distribute water, electricity and telecommunication services; -provide stand-by or back up for each service or facility the employer may provide, in the event of its interruption or failure; -clear up and make good when the service or facility is no longer required, leave the employer's facilities in the condition they were before the contractor first made use of them, fair wear and tear excepted, and -continuously clear and dispose of waste and surplus materials to maintain the site in a tidy state.

Site establishment (continued)	Facilities provided by the contractor	State requirements for facilities to be provided by the contractor such as construction camps, offices and workshops facilities for the due and proper fulfilment of the contract and those facilities for use by the employer and his agents. Also state what happens to these facilities upon completion of the contracts. Set out constraints, if any, as to the location by the contractor of such facilities on the site and requirements for drawings of site facilities, as necessary.
	Storage and laboratory facilities	State requirements for storage and laboratory facilities.
	Other facilities and services	State requirements for all other temporary facilities necessary for providing the works which are not provided by the employer including power, water, telecommunications, security services, medical, fire protection, sanitation and toilets, waste disposal.
	Vehicles and equipment	State requirements for vehicles, computers, survey and testing equipment, office furniture etc for the use of the employer and his agents.
	Advertising rights	Establish the rights relating to advertisements.
	Notice boards	State requirements, if any, for notice boards e.g. size, content, placing, design, timing for removal, etc, including those in respect of all types of subcontractors.
Site usage	-	State restrictions, if any, placed on the contractor and his subcontractors.
Permits and way leaves	-	Provide information on permits and way leaves obtained by the employer from authorities and state requirements for the contractor to obtain permits and way leaves from authorities.
Alterations, additions, extensions and modifications to existing works	-	State requirements for the contractor to satisfy himself that the dimensional accuracy, alignment, levels and setting out of existing structures or components thereof are compatible with the proposed works and procedures for notifying the employer's representative where this is not the case. Also state procedures for dealing with the detection of defects in work previously executed that will impact on the works.
Inspection of adjoining properties	-	State requirements for the inspection with the owners of adjacent buildings and properties and representatives of local authorities before commencing with the works that have the potential to damage surrounding buildings and property.
Water for construction purposes	-	State arrangements for procuring, transporting, storing, distributing and applying the water needed for construction purposes.
Survey control and setting out of the works	-	Provide information on survey controls established by the employer, if any, and state requirements for survey control and the setting out of the works.
MANAGEMENT		
Management of the works	Applicable SANS 1921 standards	State the number, title, part and standards for Construction and Management requirements for Works Contracts (refer to Annex A of SANS 1921-1: 2003 for specific guidance) and all associated specification data.
	Particular / generic specifications	Make reference to particular (purpose written) or generic (inhouse) specifications prepared by the employer applicable to the contract.
	Planning and programming	State requirements for format of programme, level of detail, critical path activities and their dependencies, frequency of updating, etc. Provide particulars of phased completion, programme constraints, milestone dates for completion, etc, as necessary.
	Sequence of the works	State requirements for sequence of the works if so required.
	Software application for programming	State any requirements.
	Methods and procedures	State requirements, restrictions and / or procedures in respect of: <ul style="list-style-type: none"> - the way in which work is to be executed when buildings are occupied; - the cleanliness of the site; - protection of trees and shrubs; - blasting operations; - the location of borrow pits, disposal of excess materials, deposition of materials, etc in earthworks activities; - work on or adjacent to structures, railway lines, pipelines, roads, cables etc; - the management and disposal of water on the site arising from whatever cause; - access, roads, maintenance of accesses and walkways; - cooperation with others on the site; - existing premises and adjoining properties; - dealing with underground and other existing services, cable and pipe trenches and covers; - dealing with objects of historical or environmental interest; - title to materials from excavation and demolition;

Management of the works (continued)	<ul style="list-style-type: none"> - site records; - hours of work; rules and conduct in respect of the personnel of the contractor and his subcontractors; - noise, dust, water, waste and other impediments; - checking work of others; - access for other contractors; - giving notice of work to be covered up; - scaffolding and temporary works; - care of the works; plant and materials; - establishing and removing equipment from the site; - samples and mock ups; - progress photographs; - maintenance until completion; - plant codification (configuration management); - training of operators; - materials storage facilities and samples for tests and inspections to be provided; - etc.
Quality plans and control	State requirements for quality plans and when they are to be provided. Also state requirements for quality control, samples of workmanship, etc.
Environment	State requirements and / or constraints pertaining to the minimizing of dust nuisance, noise levels, pollution of streams, and inconvenience to, or interference with the public or others arising out of the execution of the works. Also state any constraints to construction contained in environmental impact studies.
Accommodation of traffic on public roads occupied by the contractor	State requirements for safety, clearances, temporary deviations, access to properties, temporary traffic control facilities, etc.
Other contractors on site	Identify other contractors who may be employed on or near the site and are not included in the contract. Establish which parts of the site they will occupy and for what periods.
Testing, completion, commissioning and correction of defects	State requirements and / or procedures for: <ul style="list-style-type: none"> - use of the works before completion has been certified; - handover / beneficial occupation; - precommissioning and commissioning of the works or part thereof, before and after completion; - certifying completion; - start-up; operation of the works; special arrangements associated with operating plant and machinery, etc.; - training and technology transfer; - take over; - operational maintenance (if any), after completion; - work which contractors may carry out after completion has been certified (in addition to correcting defects); and - arranging access for correction of defects
Recording of weather	State requirements for the recording and gathering of weather data.
Format of communications	State formats of different types of communications (e.g. site instructions, requests for inspections) and attach pro formas of such documents, as necessary, to the end of the scope of work.
Key personnel	State requirements for a schedule of key personnel / schedule of contact particulars of key personnel, if required, and state when the schedule is to be submitted to the employers' representative. Attach pro formas of such documents to the end of the Scope of Work.
Management meetings	Provide particulars of times, days, location, attendance requirements, etc. as required and state requirements for representatives having the necessary delegated authority in respect of aspects such as planning, change management and health and safety.
Forms for contract administration	State requirements, if any, for use of standard forms for contract administration purposes and attach pro formas of such documents to the end of the scope of work. Also state if forms are available in electronic format.
Electronic payments	State details required / procedures to obtain electronic payments, as relevant.
Daily records	State requirements for daily records of resources (people and equipment employed) / site diaries in respect of work performed on the site and where such documents are to be held.

Management of the works (continued)	Bonds and guarantees	State number of copies and the place where bonds and guarantees are to be lodged. State the place where bonds and guarantees can be collected when they are released in accordance with the contract.
	Payment certificates	State requirements for substantiation of claims in payment certificates to expedite verification and certification by employer's representative.
	Permits	State requirements for contractor's staff to have security / entrance permits, etc.
	Proof of compliance with the law	State specific documents / methods by which compliance with any legislation is to be verified, as necessary.
	Insurance provided by the employer	State where copies of insurance effected by the employer may be obtained.
Health and safety	Health and safety requirements and procedures	Establish health and safety requirements and make reference to health and safety specifications, any contract between the contractor and employer, schedules, etc. Also state when such documents are to be submitted to the employer's representative. Attach pro formas of such documents to the end of the scope of work.
	Protection of the public	State requirements for the erection, maintenance and removal upon completion of hoardings with gantries, fans, safety screens, barriers, access gates, covered gangways, etc. as necessary for the enclosure of the works or portions thereof.
	Barricades and lighting	State requirements for barriers, hoardings, access gates, fences, access gangways and hand-railing, weather protection, temporary lighting and anything else necessary for the security, protection, and safety of the public, employees of the contractor and others.
	Traffic control on roads	State safety requirements and procedures where the contractor has occupation of public and private roads.
	Measures against disease and epidemics	State requirements for measures to be taken to prevent the spread of diseases and epidemics.
	Aids awareness	State requirements for aids awareness campaigns, counselling, etc.
ANNEXES		
Annexes	(List by title)	Attach other data sheets, completed returnable schedules, pro forma documents, particular specifications, drawings, sketches, etc. that are referred to in this document.

3.4 The SANS 1921 family of standards describe generic construction and management requirements for engineering and construction works. Standards South Africa have now published the first 6 parts of SANS 1921, *Construction and management requirements for works contracts*. These standards address the following:

Part and title	Abstract
SANS 1921-1 :2004 - Part 1: General engineering and construction works	Establishes generic general construction and management requirements, including planning, programme and method statements; materials, samples and fabrication drawings; site establishment; survey control; temporary works; existing services; health and safety requirements; environmental requirements; alterations, additions, extensions and modifications to existing works; inspection of adjoining properties; and attendance on nominated and selected subcontractors.
SANS 1921-2 :2004 - Part 2: Accommodation of traffic on public roads occupied by the contractor	Establishes generic construction, management and maintenance requirements for temporary deviations and detours, barricades and signs, and everything else that is necessary for the safe and easy passage of all public traffic during construction, the defects liability period, and the obliteration of temporary deviations as they become redundant.
SANS 1921-3 / :2004 - Part 3: Structural steelwork	Contains requirements for managing the fabrication and erection of structural steelwork including responsibilities for design and construction; planning, programme and method statements; materials, samples and fabrication drawings; quality assurance; drawings, information and calculations; equipment used to construct the works; site establishment; survey control and location of existing works; site operations; existing services; health and safety; environmental requirements; inspection of adjoining properties; and certificate of completion.
SANS 1921-4/ :2004 - Part 4: Third-party management support in works contracts	Establishes requirements for construction management services, materials management services or a combination of such services in engineering and construction works contracts in which the employer appoints third parties to provide certain resources which a works contractor lacks.
SANS 1921-5 :2004 - Part 5: Earthworks activities which are to be performed by hand	Identifies earthworks activities and sub-activities which are performed by hand.

SANS 1921-6/ :2004 - Part 6: HIV/AIDS awareness	Establishes the means by which the risk of HIV spreading between and among construction workers and the local community can be reduced.
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This family of standards is suitable for use in most contracting strategies, ranging from design by employer to design and build and are generally compatible with the provisions of the Fédération Internationale des Ingénieurs-Consils's (FIDIC) First Edition (1999) series of conditions of contract, the Joint Building Contracts Committee's (JBCC) series 2000 agreement, the Institution of Civil Engineer's New Engineering Contract (NEC3) system of contracts and the South African Institution of Civil Engineering's General Conditions of Contract for Construction Works (2004). (Management requirements are embedded in the most recent edition of JBCC 2000 Principal Building Agreement. Some of the clauses in either in the PBA or in SANS 1921-1 may have to be deleted to ensure that there are no conflicting requirements.)

It should be noted that:

- SANS 1921-1 is a synthesis of the construction and management requirements established in the Standardised Specification for Civil Engineering (General) SABS 1200 A:-1986 which was originally prepared by the South African Institution of Civil Engineering, the standard Specifications for Road and Bridge Works for State Roads Authorities (1998) prepared by the Committee of Land Transport Officials and the Preliminaries (May 1998) of the Joint Building Contracts Committee. SANS 1921-1 is generic to all engineering and construction works. It allows the employer to allocate responsibilities for design in any one of three contracting strategies
- SANS 1921-2 is based on the provisions of the standard Specifications for Road and Bridge Works for State Roads Authorities (1998) prepared by the Committee of Land Transport Officials.
- SANS 1921-3 may be used in either main contracts or subcontracts to describe the construction and management requirements for steelwork.
- SANS 1921-4 may be used to describe the scope of work for the third-party management support in a service contract or an engineering and construction works contract.
- SANS 1921-5 replaces the generic labour-intensive specification provided in the Department of Public Works' Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP).
- Research indicates that the South African construction industry has the third highest incidence of HIV/Aids in South Africa. The construction sector has a predominantly migratory labour force, making it a prime contributor to the spread of HIV/Aids. Labour camps are a breeding ground for the spread of HIV/Aids and Sexually Transmitted Diseases (STDs), this being compounded by the situation where migrant workers on contract generally avoid or are ignorant of the consequences of casual sexual relationships. SANS 1921-6 has been developed together with the CIDB to address this situation.

Guidance on how to incorporate the SANS 1921 standard in procurement documents may be found in Annex A of each of these standards.

- 3.5 SANS 2001 comprises a number of parts, each part of which addresses a specific component of construction works. The prime purpose in the production of this family of standards was to arrive at a set of standards that are generally applicable to construction works, and which can be readily modified to make them applicable to particular works.

The SANS 2001 family of standards provides technical descriptions of:

- a) the standard of materials and workmanship that are to be used in the works that are executed; and / or
- b) the performance of the works when completed.

- 3.6 Standards South Africa is in the process of replacing the SABS 1200 standardised specification for civil engineering works with SANS 2001 family of standards for construction works. The SANS 2001 family of standards provides technical descriptions of the standard of materials and workmanship that will be used in the works that are executed or in the performance of the works when completed (or both). These standards do not make reference to the actions of those responsible for executing the works or the parties to a contract,

i.e. to the constraints relating to the manner in which contract work is to be performed. Neither do they deal with the commercial arrangements of such contracts. These standards are suitable for use in any "in-house" construction work or in all types of engineering and construction works contracts, for example, design by employer, design and build, develop and construct, construction management or management contracts.

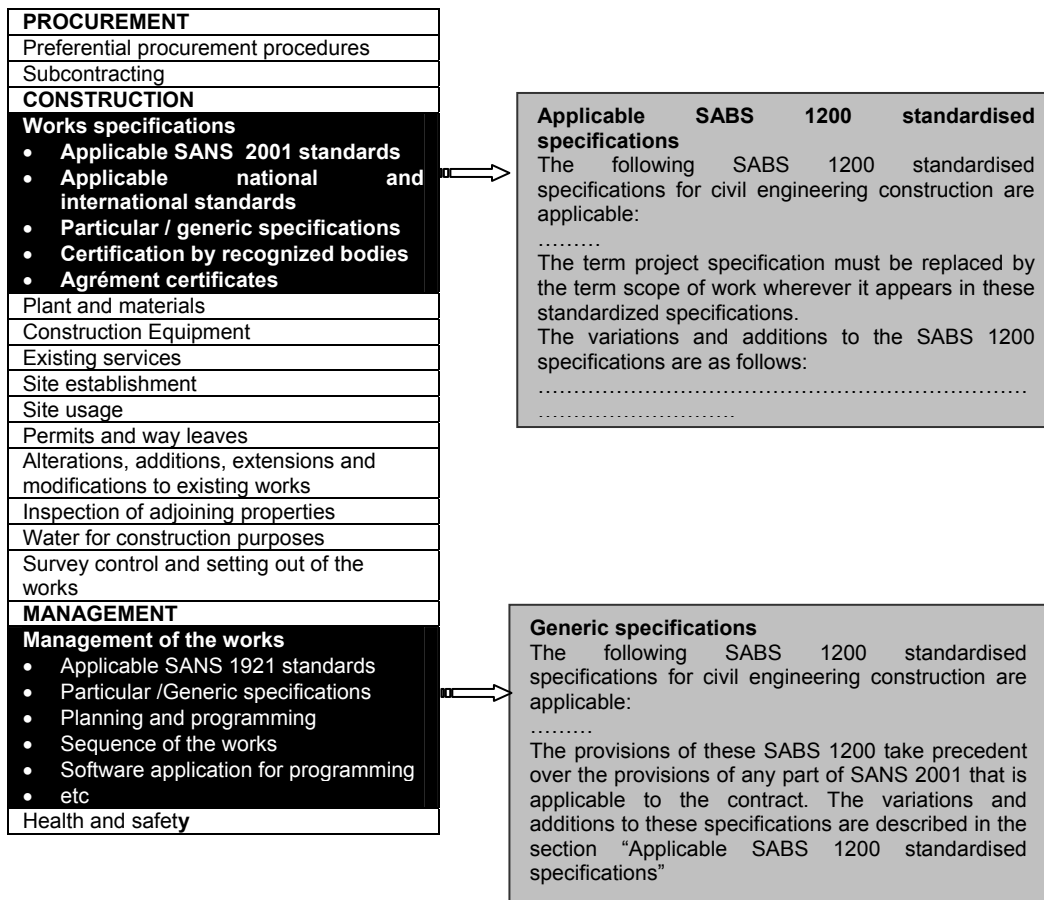
Standard requirements pertaining to the manner in which works are constructed can be found in the SANS 1921 family of standards.

SABS 1200 series of specifications are scheduled to be withdrawn in 2008.

The third edition of SANS 10400 which is scheduled for publication before the end of 2007, introduces construction rules whenever a design rule is provided. Accordingly, the following SANS 2001 standards that relate to the structure of the building designed in accordance with the deemed-to-satisfy rules should be incorporated into the scope of work:

- SANS 2001- CC1, Construction works Part CC1: Concrete works (structural)
- SANS 2001- CC2, Construction works Part CC2: Construction works (minor works)
- SANS 2001- CG1, Construction works Part CG1: Installation of glazing in window and door frames
- SANS 2001- CM1, Construction works Part CM1: Masonry walling
- SANS 2001-CT1, Construction works Part CT1: Structural timberwork (flooring)
- SANS 2001-CT2, Construction works Part CT2: Structural timberwork (roofing)
- SANS 2001-EM1, Construction works Part EM1: Cement plaster

3.7 The recommended manner in which SANS 1200 standardised specification for civil engineering works are to be incorporated in the works is as follows:



3.8 It is recommended that SANS 1921 standards be referenced in the scope of work in the following manner (see also Annex A of each part of SANS 1921 for specific guidance in setting up the specification data):

The following parts of SANS 1921 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 1921.....
- 2) SANS 1921.....

The abovementioned South African National Standards, which can be purchased online from www.sabs.co.za, make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

The associated Specification Data is as follows:

SANS 1921-1, Construction and management requirements for works contracts – Part 1: General engineering and construction works	
Clause	Specification data
Essential data	
4.1.7	There are no requirements for drawings, information and calculations for which the contractor is responsible
4.2.1	The responsibility strategy assigned to the contractor for the works is A.
4.2.2	The structural engineer is
4.3.1	The planning, programme and method statements are to comply with the following: 1)..... 2)..... 3)..... State requirements for format of programme, level of detail, critical path activities and their dependencies, frequency of updating, etc., if not provided in the contract data. Provide particulars of phased completion, programme constraints, milestone dates for completion, etc., as necessary. State requirements for sequencing, as required. State any requirements for software for programmes.
4.3.3	The notice period for inspection is Days
4.7.3	The overbreak allowances for blasting are provided for in the scope of work. <i>(Compiler to include the above if appropriate or specify the overbreak allowances if not provided elsewhere)</i>
4.9.3	The trees and shrubs which are not to be disturbed are identified in the scope of work. <i>(Compiler to state requirements if not covered elsewhere in the scope of work)</i>
4.12.2	The samples of materials, workmanship and finishes that the contractor is to provide and deliver to the employer are: 1)..... 2).....
4.12.2	The fabrication drawings that the contractor is to provide and deliver to the employer are: 1)..... 2).....
4.14.3	The office accommodation, equipment, accommodation for site meetings and other facilities for use by the employer and his agents are: 1) Site office which shall be used for site meetings and for the contractor's use. Such an office shall comprise a minimum of 20m ² in area and 3 m high, be ventilated, have good lamination, must be reasonably sound proof, and have a hard floor construction. It shall be furnished with a desk on which drawings can be rolled open and on which there is sufficient writing space and sufficient temporary chairs or benches to accommodate all persons present at site meetings. 2).....
4.14.5	The Contractor is required to provide latrine and ablution facilities.
4.14.6	The requirements for the provision and erection of separate sign boards for consultants and subcontractors are: 1) The boards must comply with the official standard type signboard of the Employer and be at least 2750 x 1800 mm high. 2) The boards must be constructed with a firm flat exposed face using suitable material of firm construction, painted and lettered according to the standard drawings available from the Employer on request and mounted on sturdy pipe-standards at a height of 1800 mm above natural ground level.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are: 1)..... 2).....
4.17.3	Services which are known to exist on the site are: 1)..... 2).....
4.17.4	The requirements for detection apparatus are: 1) 2)

4.18	The following standards and specifications shall be in addition to the provisions of 4.18: 1) 2)
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Variations
1..... 2.....

Additional clauses

1 Site meetings and procedures

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

2 Water and electricity

The Employer does not warrant that any water supply or electricity supply that may exist is adequate for the proper execution of the works. The responsibility strategies in terms of the tabulation below that will apply to the contract is:

- a) water : A/B/C (*Compiler to delete that which is not applicable*)
- b) electricity : A/B/C (*Compiler to delete that which is not applicable*)

Service	Option		
	A Contractor responsibility	B Employer responsibility	C
Water	The Contractor is to provide, and remove and make good upon completion, all the necessary temporary plumbing connections and purchase water from the local authority for the works at his own cost.	The Contractor shall make, and upon completion remove, all the necessary connections to the Employer's water supply at designated points and make use of water free of charge for construction purposes only.	The Contractor shall make, and upon completion remove, all the necessary connections and water meters to the Employer's water supply at designated points and be responsible for costs associated with all water consumed.
Electricity	The Contractor is to provide, and remove and make good upon completion, all the necessary temporary electrical connections and installations and purchase electricity from the local authority / ESKOM for the works at his own cost.	The Contractor shall make, and upon completion remove, all the necessary electrical connections to the Employer's electrical supply at designated points and make use of electricity free of charge for construction purposes only.	The Contractor shall make, and upon completion remove, all the necessary connections and meters to the Employer's electrical supply and be responsible for costs associated with all electricity consumed.

SANS 1921-5, Construction and management requirements for works contracts – Part 5: Earthworks activities which are to be performed by hand

Clause	Specification Data
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Essential Data:

5.1	The depth of trenches which are to be excavated by hand is 1,5 metres.
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Additional clauses:

1	Stone pitching and rubble concrete masonry All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, shall be collected, loaded, off loaded and placed by hand. Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m. Grout shall be mixed and placed by hand.
2	Manufactured Elements Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.

SANS 1921-6, Construction and management requirements for works contracts – Part 6: HIV/AIDS awareness	
4.2.1(a)	A qualified service provider is a service provider that is one that is accredited or provisionally accredited training service provider in the HIV/AIDS field. A list of accredited service providers can be obtained from the Construction SETA (CETA) (tel 011-265 5900), Health and Welfare SETA (HWSETA) (011-622 6852) or on the Health and Welfare SETA website: www.hwseta.org.za .
4.2.1(a)	The HIV/AIDS awareness programme is to be repeated at four month intervals throughout the duration of the contract. (Four times in total, including the initial one at the start of the contract.)
Additional clauses	
	The duration of each workshop is not to be less than 2 ½ hours.

Note: The compiler should when using SANS 1921-1 state requirements for all other temporary facilities necessary for providing the works which are not provided by the employer, including power, water, telecommunications, security services, medical services, fire protection, sanitation and toilets, and waste disposal. The compiler should also give consideration to the following:

- Specific requirements for quality assurance systems, if necessary, should be stated. (4.4)
- Requirements for specific method statements as to how the contractor is going to set out complex works might have to be requested, e.g. at traffic interchanges, or in respect of structures requiring exacting dimensions, e.g. athletics tracks. (4.5)
- Specific requirements to restrict the risk of damage to property due to blasting should, as necessary, be stated. (Refer to Code of practice: Lateral Support in Surface Excavations; SAICE Geotechnical Division, 1989).
- Where blasting to specified profiles is required, the overbreak allowance should be specified. (4.7)
- The requirements of authorities responsible for such services and structures should be stated. (4.8)
- State minimum requirements for construction equipment. (4.13)
- State facilities which the contractor is to provide, and positions for the establishment of site facilities acceptable to the employer should be described. (4.14.1)
- Specific requirements for temporary works should be stated. (4.16)

3.9 It is recommended that SANS 2001 standards be referenced in the scope of work in the following manner (see also Annex A of each part of SANS 2001 for specific guidance in setting up the specification data):

The following parts of SANS 2001 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 2001-CC2: Concrete works (minor works)
- 2) SANS 2001-CG1: Installation of glazing in window and door frames
- 3) SANS 2001-CM1: Masonry walling
- 4) SANS 2001-CT2: Structural timberwork (roofing)
- 5) SANS 2001-EM1: Cement plaster
- 6) SANS 2001

The abovementioned South African National Standards, which can be purchased online from www.sabs.co.za, make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

The associated Specification Data is as follows:

SANS 2001-CC2: Concrete works (minor works)	
Essential Data:	
Clause	Specification data
4.2.3.1	The nominal size of aggregate shall be 13 mm
4.2.6	The grades of concrete shall be as follows:
4.7.11.2	Exposed surfaces are required to have non-skid surfaces.
Variations:	
1).....	
Additional clauses:	
1).....	
SANS 2001-CG1: Installation of glazing in window and door frames	
Essential Data:	
Clause	Specification data
4.1.1	The glazing material shall be of the following types and thicknesses:
4.1.5	The frames for glazing shall be
Variations:	
1).....	

Additional clauses: 1).....	
SANS 2001-CM1: Masonry walling	
Essential Data:	
Clause	Specification data
4.1.1.1	Burnt clay / concrete masonry units shall
4.1.4	Sands that comply with the requirements of SANS 1090 are required.
4.1.6 and 4.2.1.2	Mortar plasticizers and set-retarder admixtures are permitted.
4.1.7	Pigments are required. Pigments shall have ...
4.1.9	Brickforce and rod reinforcement shall be galvanized / Brickforce and rod reinforcement shall be made of stainless steel wire.
4.1.9.4	Prestressing steel shall comprise the following:
4.1.10	Metal lath strips shall comply with the requirements of SANS 190-2.
4.1.12	Metal wall ties in cavity walls shall be of the type.
4.1.12	Only metal wall ties shall be used.
4.1.12.1	Metal ties shall have a minimum thickness of galvanizing of 750 g/m ² .
4.1.12.1	Metal wall ties shall be made of stainless steel wire.
4.1.13	The requirements for steel door frames and steel window frames are as follows:
4.1.13	Steel and window frames shall be galvanized.
4.1.14	The requirements for wooden door frames are as follows:
4.1.15	Masonry anchors shall have the following properties:
4.1.16	Damp-proof course material shall comprise
4.2.1	Mortars shall comply with the requirements of
4.2.1.2	Mortar plasticizers and set-retarding admixtures may be added to mixes.
4.3.8.1	Joints in face masonry shall be finished
4.3.8.3	Pointing is required.
4.4.1.1	Multileafed walls shall be constructed in English garden wall bond.
4.4.1.2	Single-leaf, collar-jointed, diaphragm and cavity walls shall be constructed in
4.6.3	Reference panels are required and shall be as follows:
4.7.1.1	The walls shall be constructed in bond.
4.7.2.1.3	High-lift construction is permitted.
4.10.1.1	The reinforcement in bed joint reinforced lintels shall comprise
4.10.2.1	The reinforcement in bond and U-shaped lintels shall comprise
4.11.1	Control and articulation joints shall be
4.14.3	Fibre-cement sills need not be of a uniform length.
4.14.4	The external sloping face of the masonry sill shall not be painted.
4.16	Roof anchors shall be in accordance with the requirements of SANS 10400.
5.1	The degree of accuracy shall be
5.2.3	The frequency of testing strength mortar shall be as follows:
Variations: 1).....	
Additional clauses: 1).....	
SANS 2001-CT2: Structural timberwork (roofing)	
Essential Data:	
Clause	Specification data
4.1.2.1 and 4.1.2.2	Laminated/Softwood timber joists shall be grade and have a cross section of
4.1.2.5	All softwood timber shall be treated against the effects of rot, fungus and insect attack.
4.1.3.1	Roofing poles shall comply with SANS 457-2 (softwood) or SANS 457-3 (hardwood).
4.1.5.5.1	Metal punched plate hangers and hurricane clips shall
4.1.5.5.2	Certification of safe working loads shall be tested by...
4.1.5.6	Metal masonry anchors shall be of the expanding type, be corrosion resistant and have a diameter and length of not less than

4.2	The roof trusses and bracing details shall be in accordance with the requirements of Softwood rafters in accordance with the requirements of shall be placed at centers that do not exceed m The standard bracing details for prefabricated trusses contained in SANS 10243 shall be used
5.1	The moisture content of 10 % of all timber brought to the site shall be confirmed.
Variations: 1).....	
Additional clauses: 1).....	
SANS 2001-EM1: Cement plaster	
Essential Data:	
Clause	Specification data
4.1.1	Cement shall comply with the requirements of SANS 50197-1 or SANS 50413-1.
4.1.3	Sand shall comply with the requirements of SANS 1090.
4.1.6.2	The following admixtures are permitted: Omit if admixtures are not permitted.
4.2.3.9	Finishing plaster shall be required in the following areas:
4.2.3.10	The finish to the plaster shall be as follows:
5	The permissible deviations shall apply to the following walls:
Variations: 1).....	
Additional clauses: 1).....	

3.10 The CIDB *Specification for Social and Economic Deliverables in the Construction Works Contracts* provides for the delivery of a wide range of social and economic deliverables including the employment of local resources, employment opportunities for labour intensive works, business opportunities, enterprise support and development programmes and skills development. It is recommended that this specification be referenced in the scope of work in the following manner (see also Annex A of this specification for specific guidance in setting up the specification data):

The contractor shall deliver the following deliverables as described in the October 2007 edition of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts (SSED) (www.cidb.org.za) and the following associated specification data.

Clause number	Specification data
Deliverable A1: Provide employment opportunities to targeted labour	
The specification data associated with SANS 1914-5 is as follows:	
2.5	The employer's representative is
	Target area Target Area 1 shall be the geographic area which falls under the jurisdiction of Target Area 2 shall be the geographic area, excluding Target Area 1, which falls under the jurisdiction of the Council. Target Area 3 shall be the geographic area which falls within the Province.
2.8	Targeted labour means
	The targeting strategy is
2.2	The contract participation goal is% or The contractor participation goal is as stated in the Preferencing Schedule or The contract participation goal is as stated in the scope of work / partnering schedule or There is no specific contract participation goal set for this contract
2.9	The following weightings shall apply: 1 Targeted labour other than 2 Targeted labour (.....) 3 Targeted labour (.....)

Clause number	Specification data
3.3.2	Contracts with targeted labour must include the following clauses / comply with the following:
Deliverable A2: Utilise local resources	
The specification data associated with SANS 1914-4 is as follows:	
2.6	The employer's representative is
	Target area Target Area 1 shall be the geographic area which falls under the jurisdiction of Target Area 2 shall be the geographic area, excluding Target Area 1, which falls under the jurisdiction of the Council. Target Area 3 shall be the geographic area which falls within the Province.
2.11	A targeted enterprise is
2.12	Targeted labour means
	The targeting strategy is
2.3	The contract participation goal is% or The contractor participation goal is as stated in the Preferencing Schedule or The contract participation goal is as stated in the scope of work / partnering schedule or There is no specific contract participation goal set for this contract
3.2.1	A contractor may achieve the contract participation goal only by means of Method
3.2.2	The targeted enterprise declaration and letters of undertaking are to be submitted within 3 months of the commencement of the contract.
3.3	The following weightings shall apply: Targeted area 1 Targeted area 2 Targeted area 3 or Targeted enterprise type 1 Targeted enterprise type 2 Targeted enterprise type 3
Deliverable B1: Provide employment and skills development opportunities to targeted labour	
4.3.1.1	The following activities are to be carried out by temporarily employed local workers: <ul style="list-style-type: none"> earthworks activities which are to be performed by hand, namely. trench excavation, compaction of backfilling to trenches in areas not subject to traffic, clearing and grubbing, shaping, loading, haul, off-loading, spreading, compaction and grassing stone pitching and rubble masonry manufactured elements
4.3.2.1.2	The rate of pay set is Rper task or per day.
The specification data associated with SANS 1921-5 is as follows	
	Essential data 5.1 The depth of trenches which are to be excavated by hand is m Variations Additional clauses
Deliverable C1: Provide business opportunities for targeted enterprises	
The specification data associated with SANS 1914-1 is as follows:	
2.7	The employer's representative is
2.17	A targeted enterprise is
	The targeting strategy is

Clause number	Specification data
	<p>The contract participation goal is%</p> <p><i>or</i></p> <p>The contractor participation goal is as stated in the Preferencing Schedule</p> <p><i>or</i></p> <p>The contract participation goal is as stated in the scope of work / partnering schedule</p> <p><i>or</i></p> <p>There is no specific contract participation goal set for this contract</p>
	<p>A contractor may achieve the contract participation goal only by means of the methods set out in ..), ...) of 3.2.1.</p> <p><i>or</i></p> <p>The contract participation goal may only be achieved by subcontracting work to one or more targeted enterprises to perform commercially useful functions in the performance of the contract.</p>
	<p>The targeted enterprise declaration and letters of undertaking are to be submitted within 3 months of the commencement of the contract.</p>
4.5.1	<p>The following portions of the works shall be subcontracted:</p> <p>.....</p> <p>.....</p> <p><i>or</i></p> <p>A contractor shall achieve the contract participation goal by subcontracting work to targeted enterprises in accordance with the provisions of 4.4 for deliverable C1.</p>
4.5.2	<p>The advertising procedure to be followed is</p> <p>The manner in which subcontractors are to be prequalified is</p> <p>The eligibility criteria for submitting a tender is</p> <p>The preferences set out in annexure are to be offered to tenderers. The maximum number of points allocated to</p> <p>Method ... is to be used in the evaluation of tenders.</p>
4.5.2.1	<p>The Contract Data shall be based on the latest edition of</p>
Deliverable D1: Provide third party management support to targeted contractors	
	<p>Construction management services only are required.</p> <p>Construction and materials management services are required.</p> <p>Construction management services are required. Materials management services will be provided by others.</p>
5.1.1(b)	<p>The construction manager is required to arrange for the supply of mechanical equipment and the supply and delivery to site of materials.</p>
5.1.1(i)	<p>The construction manager is required to provide the following site facilities:</p> <p>.....</p>
5.1.1(l)	<p>The construction manager is required to assist the contractor to register with the following public bodies:</p> <p>.....</p>
5.2.1(b)	<p>The employer's policy pertaining to conditions of employment is as follows:</p> <p>.....</p>
5.1.3.1(h)	<p>The following name boards are required:</p> <p>.....</p>
4.7.1.1	<p>The contractor is required to procure a mentor.</p> <p><i>or</i></p> <p>The contractor is required to interact with who has been appointed by the employer to provide mentorship services.</p>
4.7.1.2	<p>The contractor is required to brief the mentor prior to the calling of tenders</p>

Clause number	Specification data
	<p>The advertising procedure to be followed is</p> <p>The eligibility criteria for submitting a tender is</p> <p>The preferences set out in annexure are to be offered to tenderers. The maximum number of points allocated to</p> <p>Method ... is to be used in the evaluation of tenders.</p> <p>Annex D of this specification shall be incorporated in the scope of work of the contract with the mentor</p>
	The Contract Data shall be based on the latest edition of
Deliverable D3: Execute the contract in joint venture with a targeted partner	
The specification data associated with SANS 1914-2 is as follows:	
2.7	The employer's representative is
2.13	Targeted partner The targeting strategy is
2.3	<p>The contract participation goal is%</p> <p>or</p> <p>The contractor participation goal is as stated in the Preferencing Schedule</p> <p>or</p> <p>The contract participation goal is as stated in the scope of work / partnering schedule</p> <p>or</p> <p>There is no specific contract participation goal set for this contract</p>
3.2.2	The targeted partner declaration is to be submitted within 3 months of the commencement of the contract.
Deliverable E1: Provide work opportunities towards professional registration for designated persons	
4.9.1	A designated person is a candidate quantity surveyor / candidate engineer / candidate engineering technologist / candidate certificated engineer / candidate certificated engineer, /candidate engineering technician / candidate construction manager / candidate construction project manager registered with the South African Council for the Quantity Surveying Profession / Engineering Council of South Africa who is
4.9.1	Work opportunities for a period not less than months are to be provided for designated persons.
Deliverable E2: Provide experiential work opportunities towards a technical qualification for designated persons	
4.10.1	A designated person is a person studying towards a degree or diploma at an accredited institution of learning in civil engineering / quantity surveying / construction management / construction project management who is
4.10.1	Experiential work opportunities for a period not less than months are to be provided for designated persons.
Deliverable E3: Provide experiential work opportunities and training towards trade competencies for designated persons	
4.11.1	A designated person is
4.11.1	Experiential work opportunities for a period not less than months are to be provided for designated persons.
Deliverable E4: Procure and manage a training provider to provide specific training for designated persons	
4.12	A designated person is
4.12	The specific training to be provided is as follows:
Deliverable F1: Promote HIV/AIDS awareness	
4.1	A workshop shall be held with the community within two months of the commencement of the contract. The workshop shall be repeated four months thereafter..
4.2.1(a)	<p>A qualified service provider is service provider that is one that is accredited by / appears on the list of recognised service providers published by</p> <p>The contact particulars of qualified service providers are as follows:</p> <p>Name Tel Fax email</p> <p>.....</p>

4 Services contracts

The scope of work should include information on items such as:

- a) description of the services to be provided,
- b) applicable standards / standardized briefs,
- c) variations to standardized specifications, and
- d) information pertaining to issues such as
 - 1) specific requirements,
 - 2) constraints,
 - 3) background information pertaining to the required services,
 - 4) terms of reference,
 - 5) time frames for deliverables / milestone dates,
 - 6) the places for the performance of specific tasks, and
 - 7) reporting requirements.

5 Professional services

5.1 The scope of work as a minimum should contain the information provided in 4 above.

5.2 The scope of work must be commensurate with the available budget. It is no use developing a scope of work which cannot be satisfied within the available budget. At the same time, the scope of work needs to take into account the employer's capability and capacity to manage the contract and its outcomes.

There are two basic approaches to the scope of work when soliciting tender offers for professional services. The employer can establish:

Type 1: a comprehensive or generic scope of work which a tenderer can price; or

Type 2: a scope of work, which establishes overarching employer objectives and provides further information as to what the professional service provider is expected to provide in relation to specific tasks or functions.

There is no need for the tenderer to submit an approach paper which responds to or proposes modifications to the scope of work where a type 1 scope of work is developed. An approach paper is essential where a type 2 scope of work is prepared as the scope of work that is incorporated in the contract with the successful tenderer will be based on the scope of work included in the documentation issued to tenderers and the modifications or amendments proposed in his approach paper.

Many professional bodies, employers and statutory bodies have prepared schedules of generic tasks linked to the activities associated with the delivery of projects using the design by employer contracting strategy to facilitate the establishment of requirements in the scope of work as indicated below:

Name of document	Outline of standard stages and tasks	
Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000, (Act No. 46 of 2000)	The Guideline Scope of Services makes provision for the following services:	
	<p>Normal services</p> <ul style="list-style-type: none"> • Report stage • Preliminary design stage • Design and tender stage • Working drawings • Construction stage • Targeted procurement 	<p>Additional Services</p> <ul style="list-style-type: none"> • Additional services pertaining to all stages of the project • Construction monitoring • Occupational Health and Safety Act • Quality assurance system • Lead consulting engineer • Principal agent of the client • Engineering management services • Mediation, arbitration and litigation proceedings and similar services

Name of document	Outline of standard stages and tasks	
Recommended Tariff of Fees in respect of Services rendered by a person Registered in terms of Section 19(2) of the Act in Private Consulting Practice, issued in terms of the Architectural Profession Act, 2000.	The appointment makes provision for the following services:	
	Standard Services <ul style="list-style-type: none"> • Stage 1: Appraisal and Definition of the Project • Stage 2: Design Concept • Stage 3: Design Development • Stage 4: Technical Documentation • Stage 5: Contract Administration and Inspection 	Supplementary Services <ul style="list-style-type: none"> • Special studies and designs • Existing premises • Special administrative services • Supplementary or revised documentation • Other services
Tariff of Professional Fees, effective 1 January 2005, issued in terms of the Quantity Surveying Profession Act, 2000	The appointment makes provision for the following services relating to: <ul style="list-style-type: none"> • Estimating and cost advice or equivalent stage • Documentation and procurement or equivalent stage • Contract administration or equivalent stage • Final account or equivalent stage • Affordable housing • Material source handling and control • Supplementary services <ul style="list-style-type: none"> - cost norms - locational bills of quantities - targeted procurement • Financial viability studies • Tenant requirements • Value management • Miscellaneous dispute related services 	

5.3 The following topics should be considered in the development of a scope of work for professional services.

Topic	Commentary
Client's / employer's objectives	Describe the client's / employer's overarching objectives for the project, including if necessary, the time frames for completion and expected outcomes.
Background	Describe the background to the project where the service provider is required to submit an approach paper. The background should contextualise the project and provide sufficient background information and available data for the service provider to respond to stated and perceived requirements. Or Describe, where necessary or appropriate, the background to enable the service provider to have a better understanding of the client's objectives. The background should include, as relevant and appropriate, the rationale of the project, the project history (what has been done so far and by whom), a list of relevant studies and basic data, the need for a consultancy and an outline of the issues which the consultancy should resolve.
Management / Oversight structures for the project	Describe any structures that have been put in place, if any, to exercise overall oversight and management of the project and indicate how the consultant is to interface / interact with such structures. Indicate if relevant, the role and responsibilities of everybody involved; and specify the type, timing, and relevance of everyone's participation. Clarify institutional arrangements for the supervision of consulting work, if not adequately addressed in the contract data.
Description of the services	Provide a short description / outline of the extent of the services and outline what the consultant is to provide / key deliverables. The descriptions should indicate the nature and broad scope of the services to be performed.
Requirements	The requirements should state that the service must satisfy the stated objectives of the employer in relation to the services identified in the description of services. Reference should thereafter be made to minimum requirements i.e. what the service provider is expected to provide in relation to specific tasks or functions in relation to the services that are to be provided to achieve the expected results. Reference can be made to generic scopes of work to establish minimum requirements. Alternatively, minimum requirements should be stated to ensure that the required outputs and deliverables are achieved. The requirements should generally not describe the approach or methodology by which the results are to be achieved, since these are the task of the consultancy. Where appropriate acceptance criteria should be stated; the desired level of detail; main issues to be addressed; alternatives to be considered; necessary surveys, special analyses, and models; special equipment requirements; institutional and legal framework of the project; language requirements; and quality management requirements (if needed). It may also be necessary to establish time frames for deliverables, and reporting requirements (format, frequency, and content of reports as well as the number of copies, the language, and the names of the prospective recipients of the reports).

Topic	Commentary
Co-operation with other services providers	Identify other service providers on the project and establish how interactions are to take place.
Facilities and equipment to provided by the employer	Describe the facilities, office space, equipment, software, vehicles, telecommunication systems etc which the employer will provide.
Reference data	State the reports, surveys, agreements, etc upon which the service provider is to base his service, if any. This information may include past studies, aerial photographs, maps, or records of surveys carried out in the assignment area.
Applicable national and international standards	List all applicable national, regional and international standards and all values pertaining to specific attributes relating thereto.
Particular/Generic specifications	Attach or make reference to particular (purpose written) or generic (standard inhouse) specifications (purpose written for the project or specifications) which are applicable to the services. Specifications should, wherever possible, be structured as follows:
Approvals	Identify all those parties from whom the service provider has to obtain approvals and outline the procedures that are to be followed.
Procurement	State requirements appropriate to the methodology and procedures that are to be followed. (See Annex A of SANS 10396) Make reference to Preference Schedules, if any. State the number, title and edition of SANS 1914 series of resource specifications applicable to the contract and all data and definitions required e.g. definitions of target groups, weighting factors, etc. (Refer to SANS 10396 for specific guidance) State the variations, if any, to the SANS 1914 resource specification.
Access to land / buildings / sites	Describe arrangements for access to land / buildings / sites and any restrictions relating thereto.
Planning and programming	State requirements for format of programme, level of detail, critical path activities and their dependencies, frequency of updating, key dates, etc. Provide particulars of phased completion, programme constraints, milestone dates for completion etc., as necessary. List the activities to be carried out by the employer/client or by others which are to be included in the service provider's programme.
Software application for programming	State any requirements.
Quality management	Briefly describe <ul style="list-style-type: none"> - what quality management systems the consultant will be required to operate - the intention of the employer / client in terms of the monitoring of quality management, who will carry out such monitoring (employer / client or agent) and if the monitoring forms part of a quality management system or will require only an occasional verification.
Format of communications	State formats of different types of communications and attach pro formas of such documents as an annexure to the Scope of Work. Also state requirements for the format of documents which are to be retained, e.g. microfilm, computer tapes / CDs or original form.
Key personnel	State requirements for a schedule of key personnel / schedule of contact particulars of key personnel, if required, and state when the schedule is to be submitted. Attach pro formas of such documents to the end of the Scope of Work, if not provided for in the contract data.
Management meetings	Provide particulars of times, days, location, attendance requirements, etc., as required, and state requirements for representatives having the necessary delegated authority.
Forms for contract administration	State requirements, if any, for use of standard forms for contract administration purposes and attach pro formas of such documents at the end of the Scope of Work. Also state if forms are available in electronic format.
Electronic payments	State details required / procedures to obtain electronic payments, as relevant.
Daily records	State requirements for daily records of time spent, if not provided for in the contract data.
Professional indemnity insurances	State number of copies and the place where policies are to be presented if not stated in the contract data.
Payment certificates	State requirements for substantiation of claims in payment certificates to expedite verification and certification by employer's / client's representative, if not provided for in the contract data.
Use of documents by the employer	State the purpose for which the employer / client will be using any documents provided by the consultant e.g., construction, maintenance, extension, rebuilding, etc.
Property provided for the Consultant's use	List all property to be provided by the employer / client and others for the consultants use.
Proof of compliance with the law	State specific documents / methods by which compliance with any legislation is to be verified, as necessary.
ANNEXES	
List by title	Provide data sheets, completed returnable schedules, pro forma documents, particular specifications, drawings, sketches etc. which are referred to in this document.

5.4 The following wording is suggested where reference to made to a generic scope of work published by a statutory body.

Service	Scope of work
Architectural	<p>Requirements Architectural services shall satisfy the stated objectives of the Employer in relation to the construction works identified in the description of the services. The consultancy shall, as a minimum, in order to satisfy these objectives provide the standard services* set out in the RECOMMENDED TARIFF OF FEES IN RESPECT OF SERVICES RENDERED BY A PERSON REGISTERED IN TERMS OF SECTION 19(2) OF THE ACT IN PRIVATE CONSULTING PRACTICE, published in terms of Board Notice 161 of 2001, issued in terms of the Architectural Profession Act, 2000, and the following supplemental and other services:</p> <p>1) 2) (compile as necessary from Board Notice)</p> <p>The consultancy may not, without the prior written approval of the employer, proceed from one stage of the project to another.</p>
Engineering	<p>Requirements The civil / mechanical / electrical engineering services shall satisfy the stated objectives of the Employer in relation to the construction works identified in the description of the services. The consultancy shall, as a minimum, in order to satisfy these objectives provide the normal services set out in the GUIDELINE SCOPE OF SERVICES AND TARIFF OF FEES FOR PERSONS REGISTERED IN TERMS OF THE ENGINEERING PROFESSION ACT, 2000, published in terms of Board Notice ... of, and the following additional services:</p> <p>1) 2) (compile as necessary from Board Notice)</p> <p>The consultancy may not, without the prior written approval of the employer, proceed from one stage of the project to another.</p>
Quantity surveying	<p>Requirements Quantity surveying services shall satisfy the stated objectives of the Employer in relation to the construction works identified in the description of the services. The consultancy shall, as a minimum, in order to satisfy these objectives provide the services set out in the TARIFF OF PROFESSIONAL FEES, effective 1 January 2005, issued in terms of the Quantity Surveying Profession Act, 2000 and the following supplementary services:</p> <p>1) 2) (compile as necessary from Tariff of Professional Fees.)</p> <p>The consultancy may not, without the prior written approval of the employer, proceed to the next stage of a project.</p>

* Where partial services are required, replace “standard services” with partial services” and indicate the stages which are required in the description of the services

5.5 The following reports may be required where a type 2 approach is utilised.

Report	Review	Commentary
Inception Report	This report should normally be submitted within six weeks after commencing the services. It should set out any major inconsistency in the Scope of Work, difficulties in executing the contract, the methodology that the consultancy is to apply in the execution of the contract, key assumptions in the development of the deliverables, etc.	This report permits the consultancy to outline the precise manner in which the project will be executed and to clarify issues identified in commencing the service that may impact on deliverables. The report also provides the employer with the confidence that the outputs of the consultancy will meet expectations and satisfy the employer’s objectives. It is an excellent tool for managing the risks of both the parties.
Progress Reports	These reports should keep the employer informed on progress. They may also provide warnings of anticipated problems and indicate changes in time frames.	These reports provide management information.
Interim Reports	If the project is phased, interim reports are required to inform the employer of preliminary results, alternative solutions, and major decisions that need to be made.	The recommendations of an interim report may affect later phases of the project and even influence the results of the project.
Final Report	The final report is due at the completion of the project.	It is advisable for the employer and the consultancy to discuss the report while it is still in draft form as changes may be necessary following such discussions.

5.6 The conditions of contract in the NEC3 Professional Services Contract refer to matters which must be covered in the Scope i.e. the document that contains the Scope of Work. The Scope of Work must accordingly, address the following matters in addition to describing what the Consultant is to provide.

Subclause	Item	Relevant portion of text of clause / subclause
11.2(2) Identified and defined terms	Definition of completion.	Subclause reads: <i>Completion is when the Consultant has done all the work which the Scope states he is to do by the Completion Date</i>
11.2(5) Identified and defined terms	Definition of a defect	Subclause reads: <i>A Defect is a part of the services which is not in accordance with the Scope or applicable law.</i>
11.2(11)	Specifies and describes the services. States any constraints.	Subclause reads: <i>The Scope is information which either:</i> <ul style="list-style-type: none"> • <i>specifies and describes the services or</i> • <i>states any constraints on how the Consultant provides the Services</i> <i>and is either:</i> <ul style="list-style-type: none"> • <i>in the documents which the Contract Data states it is in or</i> • <i>in an instruction given in accordance with the contract.</i>
13.6 Communications	Form of documents for retention.	Subclause reads: <i>The Consultant retains copies of drawings, specifications, reports and other documents which records the services for the period of retention. The copies are retained in the form stated in the Scope.</i>
21.1 The Consultant's obligations	Provide the Service	Subclause reads: <i>The Consultant Provides the Service in accordance with the Scope</i>
25.4 Other responsibilities	Health and Safety	Subclause reads: The Consultant Acts in accordance with the health and safety requirements stated in the Scope.
31.2 the programme	Inclusions in the programme	Relevant portions of the subclause reads: <i>The Consultant shows on each programme which he submits for acceptance:</i> <ul style="list-style-type: none"> • <i>the order and timing of the operations which the Consultant plans to do in order to Provide the Services;</i> • <i>the order and timing of the work of the Employer and Others as last agreed with them by the Consultant or, if not agreed, as stated in the Scope.</i> • <i>other information which the Scope requires the Consultant to show on a programme submitted for acceptance.</i>
40.1 Quality management system	System requirements	Subclause reads: <i>The Consultant operates a quality management system for Providing the Services as stated in the Scope. The quality management system complies with the requirements stated in the Scope.</i>
40.2 Quality management system	Information in quality plans	Subclause reads: <i>The Consultant provides the Employer, within the period stated in the Contract Data, with a quality policy statement and a quality plan for acceptance. The quality policy statement and quality plan comply with the requirements stated in the Scope.</i>
50.2 Assessing the amount due	Details to be provided with the Consultant's invoices.	Subclause reads: <i>Invoices submitted by the Consultant include the details stated in the Scope to show how the amount due has been assessed.....</i>
60.1(1) and (5) Compensation events	Employer changes Scope. Employer or Others do not work as stated in the Scope.	Relevant portions of the subclause reads: <i>The following are compensation events.</i> <i>(1) The Employer gives an instruction changing the Scope.</i> <i>(5) The Employer or Others do not work within the times shown on the Accepted Programme or within the conditions stated in the Scope.</i>
70.1 The Parties' use of material	Use of material by the Employer	Subclause reads: <i>The Employer has the right to use material provided by the Consultant for the purpose stated in the Scope.</i>
70.4 The Parties' use of material	Consultant's use of material for other work	Subclause reads: <i>The Consultant may use the material provided by him under this contract for other work unless stated in the Scope.</i>
Option X14 X14.1 Parent company guarantee	Form of guarantee	Relevant portions of the subclause reads: <i>If a parent owns the Consultant, the Consultant gives to the Employer a guarantee by the Consultant's parent company of the Consultant's performance in the form set out in the Scope.</i>
Option X9	Rights over material	Relevant portions of the subclause reads:

Subclause	Item	Relevant portion of text of clause / subclause
X9.1 Transfer of rights		<i>The Employer owns the Consultant's rights over material prepared for this contract by the Consultant except as stated otherwise in the Scope. The Consultant obtains other rights for the Employer as stated in the Scope and obtains from a Subconsultant equivalent rights for the Employer over the material prepared by the Subconsultant. The Consultant provides to the employer the document which transfers these rights to the Employer.</i>
Option X13 X13.1 Performance bonds	Form of bond	Relevant portions of the subclause reads: <i>The Consultant gives the employer a performance bond, provided by a bank or insurer which the employer has accepted for the amount stated in the Contract Data and in the form set out in the Scope.....</i>

5.7 The conditions of contract in the CIDB Standard Professional Services contract refer to matters which must be covered in the Scope of Work. These conditions define the Scope of Work as *the document which defines the Employer's objectives and requirements and specifies the Services which must, or may, be provided under the Contract and services as the work to be performed by the Service Provider pursuant to the Contract as described in the Scope of Work.* The following matters should be addressed in the scope of work in addition to describing what the service provider is to provide.

Subclause	Item	Relevant portion of text of clause / subclause
3.12	Equipment and materials furnished by the Employer	Subclause reads as follows: <i>Equipment and materials made available to the Service Provider by the Employer, or purchased by the Service Provider with funds provided by the Employer for the performance of the Services shall be the property of the Employer and shall be marked accordingly. Upon termination or expiration of the Contract, the Service Provider shall make available to the Employer an inventory of such equipment and materials and shall dispose of them in accordance with the Employer's instructions.</i>
3.14.1(c)	Programme	Subclause reads as follows: <i>The Service Provider shall, within the time period set out in the Contract Data, submit to the Employer a programme for the performance of the Services which shall, inter alia, include:</i> <i>a) the order and timing of operations by the Service Provider and any actions required of the Employer and Others;</i> <i>b) the dates by which the Service Provider plans to complete work needed to allow the Employer and Others to undertake work required of them; and</i> <i>c) other information as required in terms of the Scope of Work or Contract Data.</i>
4.1.1	Information	Subclause reads as follows: <i>The Employer shall timeously provide to the Service Provider, free of cost, all available information and data in the Employer's possession which may be required for the performance of the Services</i>
4.3.1	Assistance	Subclause reads as follows: <i>The Employer shall co-operate with the Service Provider and shall not interfere with or obstruct the proper performance of the Services. The Employer shall as soon as practicable:</i> <i>a) authorise the Service Provider to act as his agent insofar as may be necessary for the performance of the Services;</i> <i>b) provide all relevant data, information, reports, correspondence and the like, which become available;</i> <i>c) procure the Service Provider's ready access to premises, or sites, necessary for the performance of the Services;</i> <i>d) assist in the obtaining of all approvals, licenses and permits from state, regional and municipal authorities having jurisdiction over the Project, unless otherwise stated in the Contract Data.</i>
5.1.1	Service provider's obligations	Subclause reads as follows: <i>The Service Provider shall perform the Services in accordance with the Scope of Work with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards.</i>
8.2.1	Completion.	Subclause reads as follows: Unless terminated in terms of the Contract, or otherwise specified in the Contract Data, the Contract shall be concluded when the Service Provider has completed all Deliverables in accordance with the Scope of Work.