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For purposes of reference, all Proclamations, Government Notices, General Notices and Board Notices published are included in the following table of contents which thus forms a weekly index. Let yourself be guided by the Gazette numbers in the righthand column:

CONTENTS

and weekly Index

No.		Page No.	Gazette No.
GOVERNMENT AND GENERAL NOTICES			
Health, Department of			
<i>Government Notices</i>			
R. 1388	Medicines and Related Substances Act, 1965: Regulations: Transparent pricing system for medicines and scheduled substances	4	31735
R. 1389	do.: do.: do	7	31735
<i>General Notice</i>			
1534	Medicines and Related Substances Act (101/1965): Medicines Control Council: Conditions of registration of a medicine in terms of the provisions of section 15 (7)	3	31696
Home Affairs, Department of			
<i>Government Notices</i>			
R. 1390	Recognition of Customary Marriages Act (120/1998): Notice in terms of section 4 (3) (b)	8	31735
R. 1391	do.: Notice in terms of section 4 (3) (a) ..	9	31735
Independent Communications Authority of South Africa			
<i>General Notice</i>			
1579	Electronic Communications Act (36/2005): Conversion of Value Added Network Services licences to Electronic Communications Network Services	3	31746
Minerals and Energy, Department of			
<i>Government Notice</i>			
1398	South African Electricity Supply Industry: Electricity Pricing Policy (EPP)	3	31741
National Treasury			
<i>Government Notice</i>			
1359	Division of Revenue Act (2/2008): Approval of allocations	3	31708
South African Qualifications Authority			
<i>Government Notices</i>			
1362	Standards Generating Body (SGB) for Sport, Recreation & Fitness registered by Organising Field 02—Culture and Arts	3	31713
1363	National Standards Bodies Regulations: Task Team for Curative Health registered by Organising Field 09—Health Sciences and Social Services	8	31713
1364	do.: Standards Generating Body (SGB) for Generic Manufacturing, Engineering & Technology registered by Organising Field 06—Manufacturing, Engineering and Technology	16	31713
1365	do.: Standards Generating Body (SGB) for Manufacturing and Assembly Processes registered by Organising Field 06—Manufacturing, Engineering and Technology	62	31713

Alle Proklamasies, Goewermentskennisgewings, Algemene Kennisgewings en Raadskennisgewings gepubliseer, word vir verwysingsdoeleindes in die volgende Inhoudsopgawe ingesluit wat dus 'n weeklikse Indeks voorstel. Laat uself deur die Koerantnommers in die regterhandse kolom lei:

INHOUD

en weeklikse Indeks

No.		Bladsy No.	Koerant No.
GOEWERMENTS- EN ALGEMENE KENNISGEWINGS			
Binnelandse Sake, Departement van			
<i>Goewermentskennisgewings</i>			
R. 1390	Recognition of Customary Marriages Act (120/1998): Notice in terms of section 4 (3) (b)	8	31735
R. 1391	do.: Notice in terms of section 4 (3) (a) ..	9	31735
Gesondheid, Departement van			
<i>Goewermentskennisgewings</i>			
R. 1388	Medicines and Related Substances Act, 1965: Regulations: Transparent pricing system for medicines and scheduled substances	4	31735
R. 1389	do.: do.: do	7	31735
<i>Algemene Kennisgewing</i>			
1534	Wet op Beheer van Medisyne en Verwante Stowwe (101/1965): Medisynebeheerraad: Voorwaardes vir die registrasie van 'n medisyne in terme van die bepalinge van artikel 15 (7)	4	31696
Handel en Nywerheid, Departement van			
<i>Goewermentskennisgewings</i>			
R. 1392	National Regulator for Compulsory Specifications Act (5/2008): Proposed amendment of the compulsory specification for Motor Vehicles of Categories 03/04	10	31735
R. 1393	do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories M2/3	22	31735
R. 1394	do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories N2/3	40	31735
R. 1395	do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories 01/02	54	31735
R. 1396	Standards Act (29/1993): Proposed introduction of a compulsory specification for Single-Capped Fluorescent Lamps	68	31735
Minerale en Energie, Departement van			
<i>Goewermentskennisgewing</i>			
1398	South African Electricity Supply Industry: Electricity Pricing Policy (EPP)	3	31741
Nasionale Tesourie			
<i>Goewermentskennisgewing</i>			
1359	Division of Revenue Act (2/2008): Approval of allocations	3	31708
Onafhanklike Kommunikasie-owerheid van Suid-Afrika			
<i>Algemene Kennisgewing</i>			
1579	Electronic Communications Act (36/2005): Conversion of Value Added Network Services licences to Electronic Communications Network Services	3	31746

No.		Page No.	Gazette No.	No.		Bladsy No.	Koerant No.
1366	National Standards Bodies Regulations: Standards Generating Body (SGB) Mining and Minerals registered by Organising Field 06—Manufacturing, Engineering and Technology.....	115	31713	Suid-Afrikaanse Kwalifikasie-owerheid			
Trade and Industry, Department of				Goewermentskennisgewings			
<i>Government Notices</i>				1362	Standards Generating Body (SGB) for Sport, Recreation & Fitness registered by Organising Field 02—Culture and Arts.....	3	31713
R. 1392	National Regulator for Compulsory Specifications Act (5/2008): Proposed amendment of the compulsory specification for Motor Vehicles of Categories 03/04 do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories M2/3.....	10	31735	1363	National Standards Bodies Regulations: Task Team for Curative Health registered by Organising Field 09—Health Sciences and Social Services.....	8	31713
R. 1393	do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories M2/3.....	22	31735	1364	do.: Standards Generating Body (SGB) for Generic Manufacturing, Engineering & Technology registered by Organising Field 06—Manufacturing, Engineering and Technology.....	16	31713
R. 1394	do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories N2/3.....	40	31735	1365	do.: Standards Generating Body (SGB) for Manufacturing and Assembly Processes registered by Organising Field 06—Manufacturing, Engineering and Technology.....	62	31713
R. 1395	do.: Proposed amendment of the compulsory specification for Motor Vehicles of Categories 01/02.....	54	31735	1366	do.: Standards Generating Body (SGB) Mining and Minerals registered by Organising Field 06—Manufacturing, Engineering and Technology.....	115	31713
R. 1396	Standards Act (29/1993): Proposed introduction of a compulsory specification for Single-Capped Fluorescent Lamps	68	31735	RAADSKENNISGEWINGS			
BOARD NOTICES				1	Engineering Council of South Africa: Notification of indicative time based fee rates	5	31749
1	Engineering Council of South Africa: Notification of indicative time based fee rates	5	31749	2	Engineering Profession Act (46/2000): Engineering Council of South Africa: Guideline Scope of Services and Tariff of Fees for Persons registered.....	7	31749
2	Engineering Profession Act (46/2000): Engineering Council of South Africa: Guideline Scope of Services and Tariff of Fees for Persons registered.....	7	31749				

IMPORTANT ANNOUNCEMENT

Closing times **PRIOR TO PUBLIC HOLIDAYS** for GOVERNMENT NOTICES, GENERAL NOTICES, REGULATION NOTICES AND PROCLAMATIONS

2009

The closing time is **15:00** sharp on the following days:

- ▶ 19 December, Friday, for the issue of Friday 2 January 2009
- ▶ 19 March, Thursday, for the issue of Friday 27 March 2009
- ▶ 2 April, Thursday, for the issue of Thursday 9 April 2009
- ▶ 8 April, Wednesday, for the issue of Friday 17 April 2009
- ▶ 22 April, Wednesday, for the issue of Thursday 30 April 2009
- ▶ 30 April, Thursday, for the issue of Friday 8 May 2009
- ▶ 11 June, Thursday, for the issue of Friday 19 June 2009
- ▶ 6 August, Thursday, for the issue of Friday 14 August 2009
- ▶ 17 September, Thursday, for the issue of Friday 25 September 2009
- ▶ 10 December, Thursday, for the issue of Friday 18 December 2009
- ▶ 15 December, Tuesday, for the issue of Thursday 24 December 2009
- ▶ 21 December, Monday, for the issue of Thursday 31 December 2009
- ▶ 30 December, Wednesday, for the issue of Friday 8 January 2010

Late notices will be published in the subsequent issue, if under special circumstances, a late notice is accepted, a double tariff will be charged

The copy for a SEPARATE Government Gazette must be handed in not later than three calendar weeks before date of publication

BELANGRIKE AANKONDIGING

Sluitingstye **VOOR VAKANSIEDAE** vir GOEWERMENTS-, ALGEMENE- & REGULASIE- KENNISGEWINGS ASOOK PROKLAMASIES

2009

Die sluitingstyd is stiptelik **15:00** op die volgende dae:

- ▶ 19 Desember, Vrydag, vir die uitgawe van Vrydag 2 Januarie 2009
- ▶ 19 Maart, Donderdag, vir die uitgawe van Vrydag 27 Maart 2009
- ▶ 2 April, Donderdag, vir die uitgawe van Donderdag 9 April 2009
- ▶ 8 April, Woensdag, vir die uitgawe van Vrydag 17 April 2009
- ▶ 22 April, Woensdag, vir die uitgawe van Donderdag 30 April 2009
- ▶ 30 April, Donderdag, vir die uitgawe van Vrydag 8 Mei 2009
- ▶ 11 Junie, Donderdag, vir die uitgawe van Vrydag 19 Junie 2009
- ▶ 6 Augustus, Donderdag, vir die uitgawe van Vrydag 14 Augustus 2009
- ▶ 17 September, Donderdag, vir die uitgawe van Vrydag 25 September 2009
- ▶ 10 Desember, Donderdag, vir die uitgawe van Vrydag 18 Desember 2009
- ▶ 15 Desember, Dinsdag, vir die uitgawe van Donderdag 24 Desember 2009
- ▶ 21 Desember, Maandag, vir die uitgawe van Donderdag 31 Desember 2009
- ▶ 30 Desember, Woensdag, vir die uitgawe van Vrydag 8 Januarie 2010

Laat kennisgewings sal in die daaropvolgende uitgawe geplaas word. Indien 'n laat kennisgewing wel, onder spesiale omstandighede, aanvaar word, sal 'n dubbeltarief gehef word

Wanneer 'n APARTE Staatskoerant verlang word moet die kopie drie kalenderweke voor publikasie ingedien word

BOARD NOTICES RAADSKENNISGEWINGS

BOARD NOTICE 1 OF 2009 Engineering Council of South Africa

Notification of INDICATIVE TIME BASED FEE RATES

The Engineering Council of South Africa hereby makes it known that the Rates set out in the table below are the indicative time based fee rates referred to in Clause 3.4(3)(b) of the Guideline Scope of Services and Tariff of Fees Rules published under Board Notice No. 2 Government Gazette No. 31749 of 2 January 2009.

(This notice supersedes notice No. 28 of 11 April 2008)

<i>Category of Staff</i>	<i>Indicative Rate</i>
A	R 1, 650 per hour
B	R 1, 400 per hour
C	R 825 per hour
D	R 600 per hour

For ease of reference the definitions of Categories A to D, are quoted below:

(a) **Category A**, in respect of a private consulting practice in engineering, shall mean a top practitioner whose expertise and relevant experience is nationally or internationally recognized and who provides advice at a level of specialization where such advice is recognized as that of an expert.

(b) **Category B**, in respect of a private consulting practice in engineering, shall mean a partner, a sole proprietor, a director, or a member who, jointly or severally with other partners, co-directors or co-members, bears the risks of the business, takes full responsibility for the liabilities of such practice, where level of expertise and relevant experience is commensurate with the position performs work of a conceptual nature in engineering design and development,

provides strategic guidance in planning and executing a project and/or carries responsibility for quality management pertaining to a project.

(c) **Category C**, in respect of a private consulting practice in engineering, shall mean all salaried professional staff with adequate expertise and relevant experience performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to a project. A person referred to in Category B may also fall in this category if such person performs work of an engineering nature at this level.

(d) **Category D**, in respect of a private consulting practice in engineering, shall mean all other salaried technical staff with adequate expertise and relevant experience performing work of an engineering nature with direction and control provided by any person contemplated in categories A, B or C.

BOARD NOTICE 2 OF 2009**Engineering Council of South Africa****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 Engineering Council of South Africa has, under Section 34(2) of the Engineering Profession Act, 2000 (Act No. 46 of 2000) determined the guideline scope of services and tariff of fees in the Schedule.

Any amount mentioned in or fee calculated in terms of this Schedule is exclusive of Value Added Tax.

The commencement date of these Rules shall be 1 January 2009.

SCHEDULE

Guideline Scope of Services and Tariff of Fees for Registered Professionals

Index

Headings and clause numbers

1.	PREAMBLE	3
2.	GENERAL PROVISIONS	3
2.1	Repeal and Transition.....	3
2.2	Generality of Terms	3
2.3	Definitions.....	3
2.4	Short Title	4
3.	GUIDELINE SCOPE OF SERVICES	5
3.1	Normal Services	5
3.1.1	Report stage	5
3.1.2	Preliminary Design Stage.....	6
3.1.3	Design and Tender Stage	7
3.1.4	Working Drawing Stage (Only relevant for Civil and Structural Engineering Disciplines)	8
3.1.5	Construction Stage	8
3.1.6	Targeted Procurement.....	9
3.2	Additional Services	10
3.2.1	Additional Services pertaining to all Stages of the Project	10
3.2.2	Construction Monitoring	11
3.2.3	Occupational Health and Safety Act, 1993 (Act No.85 of 1993).....	12
3.2.4	Quality Assurance System	12
3.2.5	Lead Consulting Engineer	12
3.2.6	Principal Agent of the Client.....	13
3.2.7	Engineering Management Services.....	13
3.2.8	Mediation, Arbitration and Litigation proceedings and similar Services.....	14
4.	GUIDELINE TARIFF OF FEES	15
4.1	Application of Tariff of Fees	15
4.2	Fees for Normal Services	17
4.2.1	Civil and Structural Engineering Services pertaining to Engineering Projects	18
4.2.2	Civil Engineering Services pertaining to Building Projects	20
4.2.3	Structural Engineering Services pertaining to Building Projects.....	21
4.2.4	Mechanical Engineering Services pertaining to Engineering Projects.....	22
4.2.5	Electrical Engineering Services pertaining to Engineering Projects	23
4.2.6	Mechanical Engineering pertaining to Building Projects	24
4.2.7	Electrical Engineering services pertaining to Building Projects	26
4.2.8	Electronic Engineering Services.....	27
4.2.9	Services provided partially or in Stages	28
4.3	Fees for Additional Services	29
4.4	Time Based Fees	31
4.5	Expenses and Costs.....	32

Words or expressions in **bold font** are defined in Clause 1.3.

PREAMBLE

This schedule shows a set of tariff of fees that serves as a guideline to determining fees to be paid for engineering services that are fair and equitable to all parties. The guideline tariffs are based on the **cost of the works** as defined and assume that the location, size, character, form and function of the works has been defined through previous studies and investigations that have either formed part of the client's normal business practices or have been the subject of separate appointments paid for on a time and cost basis.

The client and consulting engineer may use the guideline tariffs below to come to a mutually acceptable agreement on the appropriate fee by taking the following into account:

- (i) The technical factors listed in Section 4 of this document
- (ii) Ensuring that a clear description of the Scope of Services is provided using the more comprehensive scope of services listed in Section 3 as a basis.
- (iii) Ensuring that the Scope of Work involved in the project is clearly defined and documented.

The client and consulting engineer should then agree on commercial terms that set out the timing of deliverables and related payments as well as the method of payment that seeks to balance service provider cash flow and client risk.

2. GENERAL PROVISIONS

2.1 Repeal and Transition

Subject to sub-clause (2), the Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), published under Government Gazette No. 30891, Board Notice 19 of 28 March 2008, is hereby repealed.

The provisions of Board Notice 19 of 28 March 2008 and 30 of 13 April 2008 and R.1113 of 11 June 1982 including subsequent amendments still apply in respect of **services** rendered during a **stage**, which has not yet been completed by the date of commencement of this Schedule.

2.2 Generality of Terms

In this document, except where the context otherwise requires or indicates:

- (i) the masculine includes the feminine,
- (ii) the singular includes the plural, and
- (iii) any reference to a natural person includes a juristic person

2.3 Definitions

In this Schedule, any word or expression defined in the Act has that meaning, and, unless the context otherwise indicates:

- (i) **"Building Project"** means a project comprising building work, together with its associated engineering work, where the engineer is subject to the authority of another professional acting as the Principal Agent while financial and administrative matters are dealt with by another professional.
- (ii) **"client"**, means any juristic person or organ of the State engaging a **consulting engineer for services on a project**;
- (iii) **"construction monitoring"** means the process of administering the construction contract and over-seeing and/or inspecting the works, to the extent of the

consulting engineer's engagement, for the purpose of verification that the works are being completed in accordance with the requirements of the contract that the designs are being correctly interpreted and that appropriate construction techniques are being utilized. **Construction monitoring**, to whatever extent, shall not diminish the contractor's responsibility for executing and completing the works in accordance with his contract.

- (iv) **"consulting engineer"**, for purposes of these rules only, means any professional registered in terms of **the Act**, or a juristic person who employs such professional, engaged by a **client** on a **project**;
- (v) **"contractor"** means any person or a juristic person under contract to a **client** to perform the **works** or part of it on a **project**, including a subcontractor under contract to such **contractor**;
- (vi) **"cost of the works"** means the total amount, exclusive of value added tax, certified or which would, normally, be certifiable for payment to **contractors** (irrespective of who actually carries out the works) in respect of the **works** designed, specified or administered by the **consulting engineer**, before deduction of liquidated damages or penalties, including –
 - (vii) a pro-rata portion of all preliminary and general items applicable to the **works**; and
 - (viii) the costs of new materials, goods or equipment, or a fair evaluation, of such material, goods or equipment as if new whether supplied new or otherwise by, or to, the client and including the cost or a fair evaluation of the cost of installation (the sourcing, inspection and testing of such will comprise additional services by the consulting engineer);
- (ix) **"Electronic Engineering Services"** means services related to the provision of electronic systems and detailing the terminations, signals and interconnections of electronic components as distinct from conventional electrical HV, MV and LV systems and related reticulation.
- (x) **"Engineering Project"** means a project of which the scope comprises mainly engineering work.
- (xi) **"normal services"** means the **services** set out in clause 3.1;
- (xii) **"Principal Agent"** means the Professional Service Provider appointed as such.
- (xiii) **"project"** means any total scheme envisaged by a **client**, including all the **works** and **services** concerned;
- (xiv) **"scope of work"** means the portion of the **works** for which the consulting engineer is engaged.
- (xv) **"services"** means the services contemplated in clause 3 on a **project** for which a **consulting engineer** is engaged;
- (xvi) **"stage"** means a stage of **normal services** set out in clause 3.1;
- (xvii) **"the Act"** means the Engineering Profession Act, 2000 (Act No. 46 of 2000);
- (xviii) **"total annual cost of employment"** means the total annual cost of employment as defined in clause 4.4(4);
- (xix) **"works"** means the activities on a **project** for which **contractors** are under contract to the **client** to perform or is intended to be performed, including the supply of goods and equipment;

2.4 Short Title

This Schedule is called the Guideline Scope of Services and Tariff of Fees for Registered Persons, 2009.

3. GUIDELINE SCOPE OF SERVICES

3.1 Normal Services

3.1.1 Report stage

The preparation and submission of a report embodying preliminary proposals or feasibility studies and estimates of cost and time where appropriate for consideration by the client, including all or any of the following:

- (1) Consultation with the client or client's authorized representative.
- (2) Inspection of the site of the project.
- (3) Preliminary investigation, route location, planning and a level of design appropriate to allow project decisions to be made, where any of these are required for the determination of feasibility.
- (4) Consultation with authorities having rights or powers of sanction as well as consultation with the public and stakeholder groups.
- (5) Advice to the client as to regulatory and statutory requirements, including environmental management and the need for surveys, analyses, tests and site or other investigations, as well as approvals, where such are required for the completion of the report, and arranging for these to be carried out at the client's expense.
- (6) Searching for, obtaining, investigation and collation of available data, drawings and plans relating to the works.
- (7) Investigation of financial and economic implications relating to the proposals or feasibility studies.
- (8) Clause (7) does not apply in respect of civil and structural services pertaining to **Building Projects**, except as far as the interpretation of cost figures for civil and structural services are concerned.

3.1.2 Preliminary Design Stage

Following the client's instructions to proceed with the development of preliminary proposals or the basic planning of the project, comprising all or any of the following:

- (1) Submission of a basic planning report.
- (2) Establishment of final design criteria.
- (3) Advice to the client as to the regulatory and statutory requirements, including environmental management and the need for any further surveys, analyses, tests and site or other investigations, as well as approvals, which may be required and arranging for these to be carried out at the client's expense. This advice is to be concluded by the **consulting engineer** with the interpretation of the results of these tests and investigations, including geotechnical and/or foundation investigations, together with a report containing recommendations to be applied to and incorporated in designs. The **consulting engineer** will also take the environmental management plan into account.
- (4) Advice to the client, as may be necessary, on the engagement and delineation of the services of other consultants and advisers, arranging such engagements and consultation with them on matters pertaining to the project.
- (5) Design of any process or system or refinement of the preliminary process design, where such process design is a prerequisite for the design of the project.
- (6) Preparation and submission to the client of any preliminary plans, drawings and estimates required for seeking the approval of statutory authorities and the client.
- (7) Consultation on all technical matters with the client, authorities and interested parties other than those having rights or powers of sanction, and making modifications to the preliminary design of the works arising out of such consultations.
- (8) Submission of estimates of capital and life cycle costs, financial implications and programmes for the implementation of the works.
- (9) Clause (5) does not apply in respect of civil and structural services pertaining to **Building Projects**.
- (10) Clause (8) does not apply in respect of civil and structural services pertaining to **Building Projects**, except as far as inputs to and assessment of programmes for civil and structural services are concerned or on projects where all financial, tender and contractual matters are handled by other parties.

3.1.3 Design and Tender Stage

Following the client's instructions to proceed with the preparation of all documents necessary to enable tenders for the works to be called for or for the works to be otherwise placed by the client, including all or any of the following:

- (1) Advice to the client as to the necessity for further surveys, special visits, use of specialist consultants, setting out or staking out the works, and arranging for such to be carried out at the client's expense.
- (2) Preparation of detail designs and tender and/or working drawings.
- (3) Preparation of specifications and schedules of quantities for engineering works.
- (4) Provision of information necessary for the design of other services.
- (5) Submission of updated and revised estimates, capital and life cycle costs, financial implications and programmes for implementation of the works previously submitted.
- (6) Drafting or adapting invitations to tender, tender conditions, forms of tender and conditions of contract, advising the client on tender strategies and suitable contractors and calling for tenders when instructed to do so by the client.
- (7) Advice to the client on any alternative designs and tenders, but excluding detailed inspection, reviewing and checking of alternative designs and drawings not prepared by the consulting engineer and submitted by any contractor or potential contractor.
- (8) Analyses of tenders and submission of recommendations on the acceptance of tenders and, if necessary, revising the estimates of the cost and the completion date of the works.
- (9) Advice to the client as to the provision of a construction monitoring service in accordance with clause 3.2.2, over and above that provided for under clause 3.1.5(3).
- (10) Clauses (3), (6) and (8) do not apply in respect of civil and structural services pertaining to **Building Projects** or on projects where all financial, tender and contractual matters are handled by other parties.
- (11) Clause (5) does not apply in respect of civil and structural services pertaining to **Building Projects** or on projects where all financial, tender and contractual matters are handled by other parties, except as far as inputs to and assessment of programmes for such services are concerned.

3.1.4 Working Drawing Stage (Only relevant for Civil and Structural Engineering Disciplines)

- (1) Following the client's instructions to proceed, the preparation of any further plans, designs and drawings, excluding shop details, which may be necessary for the execution of the works.
- (2) In the case of reinforced concrete works, working drawings must include bending schedules.
- (3) In the case of structural steel works, working drawings and details provided by the consulting engineer must include full information, dimensions and specifications on all sections, connections, plates, fasteners, bolts and welding, to such an extent that no further designs by contractors or other parties are required. The consulting engineer need not provide shop drawings for the manufacture of the structural steel works. \

3.1.5 Construction Stage

The overall contract administration and co-ordination, as well as **construction monitoring** of the execution of the **works** in accordance with the contract, including all or any of the following:

- (1) Placing orders for the works on behalf of the client.
- (2) Advice to the client as to the preparation of the contract documents, or preparation of the contract documents in consultation with the client.
- (3) Overall contract administration and co-ordination, as well as construction monitoring of the execution of the works for compliance with the contract and attending site meetings on a combined average frequency of at least one day every two weeks for the duration of the construction of the specific works for which the consulting engineer is engaged or at such more frequent intervals as the consulting engineer may deem necessary.
- (4) Directing construction monitoring operations, but excluding detail day-to-day construction monitoring of the works and contract administration, as provided for under clause 3.2.2.
- (5) Advice to the client as to the provision of a construction monitoring service in accordance with clause 3.2.2, over and above that provided for in this clause.
- (6) Checking contractor's drawings of structures, plant, equipment and systems for the works for conformity with design requirements, but excluding detailed checking of manufacture and installation details for erection or installation fit.
- (7) Advice to the client on any further alternative designs, but excluding detailed inspection, reviewing and checking of alternative designs and drawings not prepared by the consulting engineer and submitted by any contractor.
- (8) Issuing instructions to contractors on behalf of the client.
- (9) Issuing certificates or recommendations for payment of contractors and submitting regular reports regarding works finances and anticipated completion dates and final costs.
- (10) Advice to the client in regard to or the resolution of disputes or differences that may arise between the client and the contractor, except mediation, arbitration and/or litigation.
- (11) Preparation of and issuing variation orders on behalf of and after consultation with the client.

- (12) General inspection of materials and equipment for compliance with the original design and tender, including checking of marks or documentation for adherence to National and International standards and advice to the client regarding further inspection and testing of such materials and equipment as may be necessary and arranging for such inspection and testing to be carried out on behalf of and at the client's expense.
- (13) Making arrangements on behalf of the client for the provision and reproduction at the client's expense of such drawings and documents as may be required by the contractors and site staff for the execution of the works.
- (14) Agreeing final quantities with contractors, compiling final accounts and issuing final payment certificates.
- (15) Prepare and, on completion of the works, provide the client with record drawings, making arrangements for the contractor to supply detailed operation, operating and maintenance manuals as part of the contractor's contractual obligations, receiving such and handing it over to the client. Both sets of documents shall be in formats as agreed to with the client.
- (16) Evaluating results of contractor's commissioning procedures and tests and witnessing final performance or acceptance tests on site, only, but excluding day-to-day routine tests.
- (17) Clauses (1), (2), (9), (10), (11) and (14) do not apply in respect of civil and structural services pertaining to **Building Projects** or on projects where all financial, tender and contractual matters are handled by other parties.

3.1.6 Targeted Procurement

Should the client during any stage of the project, require the consulting engineer to perform work or services pertaining to targeted procurement, such work and or services could entail, but are not limited to, any or all of the following:

- (1) incorporation of any targeted participation goals,
- (2) the measuring of key participation indicators,
- (3) the selection, appointment and administration of participation and;
- (4) auditing compliance to the above by any contractors and/or professional consultant.

3.2 Additional Services

The following services are additional to the normal services provided by the consulting engineer, unless specifically agreed otherwise between the consulting engineer and the client. The agreement on the scope of services and remuneration shall be in writing and should, if at all possible, be concluded before such services are rendered.

3.2.1 Additional Services pertaining to all Stages of the Project

- (1) Enquiries not directly concerned with the works and its subsequent utilisation.
- (2) Valuation for purchase, sale or leasing of plant, equipment, material, systems, land or buildings or arranging for such valuation.
- (3) Making arrangements for way leaves, servitudes or expropriations.
- (4) Negotiating and arranging for the provision or diversion of services not forming part of the works.
- (5) Additional work in obtaining the formal approval of the appropriate Government Departments or Public Authorities, including the making of such revisions as may be required as a result of decisions of such Departments or Authorities arising out of changes in policy, undue delay, or other causes beyond the consulting engineer's control.
- (6) Topographical and environmental surveys, analyses, tests and site or foundation or other investigations, model tests, laboratory tests and analyses carried out on behalf of the client.
- (7) Setting out or staking out the works and indicating any boundary beacons and other reference marks.
- (8) Preparation of drawings for manufacture and installation or detailed checking of such for erection or installation fit.
- (9) Detailed inspection, reviewing and checking of designs and drawings not prepared by the consulting engineer and submitted by any contractor or potential contractor as alternative to those embodied in tender or similar documents prepared by the consulting engineer.
- (10) Inspection and testing, other than on site, of materials and plant, including inspection and testing during manufacture.
- (11) Preparing and setting out particulars and calculations in a form required by any relevant authority.
- (12) Abnormal additional services by or costs to the consulting engineer due to the failure of a contractor or others to perform their required duties adequately and timely.
- (13) Executing or arranging for the periodic monitoring and adjustment of the works, after final handover and completion of construction and commissioning, in order to optimise or maintain proper functioning of any process or system.
- (14) Investigating or reporting on tariffs or charges leviable by or to the client.
- (15) Advance ordering or reservation of materials and obtaining licenses and permits.
- (16) Preparing detailed operating, operation and maintenance manuals.
- (17) Additional services, duties and/or work resulting from project scope changes, alterations and/or instructions by the client, or his duly authorized agents, requiring the consulting engineer to advise upon, review, adapt and/or alter his completed designs and/or any other documentation and/or change the scope of his services and/or duties. Such additional services are subject to agreement in writing between the consulting engineer and the client prior to the execution thereof.
- (18) Exceptional arrangements, communication, facilitation and agreements with any stakeholders other than the client and contractors appointed for the works on which the consulting engineer provides services.
- (19) Any other additional services, of whatever nature, specifically agreed to in writing between the consulting engineer and the client.

3.2.2 Construction Monitoring

- (1) If the construction monitoring, as set out in clause 3.1.5(3), is deemed to be insufficient by the consulting engineer, the consulting engineer may, with prior written approval having been obtained from the client, appoint or make available additional staff for such construction monitoring as are necessary to undertake additional construction monitoring on site to the extent specifically defined and agreed with the client. The functions in respect of additional construction monitoring are to be limited to detailed inspections and exclude those mentioned under clause 3.1.5.
- (2) Alternatively, the client may appoint or make available staff, as intended in clause (1), subject to approval by the consulting engineer.
- (3) Staff, as intended in clauses (1) and (2), shall report to and take instructions from the consulting engineer or an authorized representative of the consulting engineer only and shall be deemed to be in the employ of the consulting engineer.
- (4) Should any change regarding the persons utilized for additional on-site monitoring or their remuneration be necessary, the utilization of such persons and/or their remuneration must be agreed in writing with the client prior to the implementation thereof.
- (5) If, for any reason, no additional staff or inadequate staff for construction monitoring is appointed, the consulting engineer shall provide additional services, including additional site visits, as required and agreed to in writing with the client prior to commencement thereof.
- (6) The duties of the consulting engineer for the following four defined levels of construction monitoring, respectively, are as follows:

(a) Level 1:

The construction monitoring staff shall:-

- (i) Monitor the outputs from another party's quality assurance programme against the requirements of the plans and specifications.
- (ii) Visit the **works** at a frequency agreed with the **client** to review important materials, critical work procedures and/or completed elements or components.
- (iii) Be available to advise the **contractor** on the technical interpretation of the plans and specifications.

(b) Level 2:

The **construction monitoring** staff shall:-

- (i) Review, preferably at the earliest opportunity, a sample of each important –
Work procedure
Construction material
for compliance with the requirements of the plans and specifications and review representative samples of important completed work prior to enclosure or completion as appropriate.
- (ii) Visit the **works** at a frequency agreed with the **client** to review important materials, critical work procedures and/or completed elements or components.
- (iii) Be available to provide the **contractor** with technical interpretation of the plans and specifications.

(c) Level 3:

The **construction monitoring** staff shall:

- (i) Maintain a part-time presence on site as agreed with the client to review random samples and review important completed work prior to enclosure or on completion as appropriate.

- (ii) Where the consulting engineer is the sole consultant or principal agent, carry out such administration of the project as is necessary on behalf of the client.
 - (iii) Be available to provide the contractor with technical interpretation of the plans and specifications.
- (d) Level 4:
- The **construction monitoring** staff shall:-
- (i) Maintain a full time presence on site to constantly review –
Work procedures
Construction materials
for compliance with the requirements of the plans and specifications and review completed work prior to enclosure or on completion as appropriate.
 - (ii) Where the **consulting engineer** is the sole consultant or principal agent, carry out such administration of the **project** as is necessary on behalf of the **client**.
 - (iii) Be available to provide the **contractor** with technical interpretation of the plans and specifications.

3.2.3 Occupational Health and Safety Act, 1993 (Act No.85 of 1993).

Should the client require the consulting engineer to undertake duties falling under the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the Construction Regulations in terms thereof, on behalf of the client, the additional services may include the following:

- (1) The consulting engineer must arrange, formally and in writing, for the contractor to provide documentary evidence of compliance with all the requirements of the Occupational Health and Safety Act, 1993 (Act No.85 of 1993).
- (2) The consulting engineer must execute the duties of the client, as his appointed agent, as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act No.85 of 1993).

3.2.4 Quality Assurance System

Where the client requires that a quality management system or quality assurance services, over and above construction monitoring services, be applied to the project, these are in addition to normal services provided by the consulting engineer and to be specifically defined and separately agreed in writing prior to commencement thereof.

3.2.5 Lead Consulting Engineer

Should the client require the consulting engineer to assume the leadership of a joint venture, consortium or team of consulting engineers, of the same discipline, prescribed or requested by the client, the additional services may include the following:

- (1) Responsibility for the overall administration of all sections of the services, including those portions of the services, which fall within the ambit of the other consulting engineers.
- (2) Responsibility for the overall co-ordination, programming of design and financial control of all the works included in the services.
- (3) Processing certificates or recommendations for payment of contractors.

3.2.6 Principal Agent of the Client

When a consulting engineer is, in addition to his normal functions as consulting engineer, appointed as the **principal agent** of the client on a project, the consulting engineer will also be responsible for the following:

- (1) Leadership of the professional team.
- (2) Submission of preliminary and developed proposals in the form of consolidated reports, drawings and specifications together with estimates of costs for the project as a whole.
- (3) The overall administration of all sections of the project including those, which fall within the ambit of the other professional members in the team.
- (4) The overall coordination, programming of design and financial control of the project.
- (5) Resolving differences that may arise between the client and the contractors, excluding mediation, arbitration or litigation
- (6) Approval of certificates for payment to contractors issued by the other professional members in the team before their presentation to the client for settlement
- (7) Making arrangements to provide the client, on completion of the works, with such record drawings as may be required for a proper record of the works as constructed and such manuals as may be required for the operation and maintenance of the relevant parts of the works
- (8) Approval of the final contract account for the project as a whole.
- (9) Manage targeted procurement services as indicated in clause 3.1.6.

3.2.7 Engineering Management Services

Should the client require the consulting engineer to undertake duties of an engineering management nature on behalf of the client, the additional services will include the following:

- (1) Leadership of the professional team.
- (2) Be responsible for the overall administration of the project including the co-ordination of the work of the team, the programming of the execution of designs and the overall financial control of the project.
- (3) Instruct the other members of the team, on behalf of the client, in writing as to the client's total requirements in connection with the project, including the services required from each of the other members and make available to them all relevant information or data pertaining to the project which is required by them. The other members of the team shall be entitled to rely upon the accuracy and completeness of such information and data furnished by the consulting engineer.
- (4) Convene and preside over regular meetings of the team and the client for purposes of planning the project including preparing and distributing agendas and minutes to all concerned.
- (5) Co-ordinate the preparation of a budget for the client, together with assistance from other members of the team and update it at regular intervals as agreed with the client.
- (6) Prepare a construction and procurement plan and policy according to the client's requirements with regard to types of contracts to be adopted, general and commercial conditions and the grouping of items and elements into various contracts.
- (7) With assistance of the other members of the team, determine and recommend to the client a policy for calling for tenders and/or negotiating contracts.
- (8) Co-ordinate reports and recommendations on tenders received, either directly or by the other members of the team, and make recommendations to the client on the award of contracts.

- (9) Award all contracts on behalf of the client and arrange for the preparation and signing of contract documents with the assistance of the other members of the team.
- (10) Issue all instructions to contractors, either directly or by delegation to the other members of the team.
- (11) Convene and preside over regular meetings on site with contractors, members of the team and the client for the purpose of administering the contract including the preparation and distribution of agendas and minutes to all concerned.
- (12) Process and certify all payment and valuation certificates and issue payment certificates for settlement.

3.2.8 Mediation, Arbitration and Litigation proceedings and similar Services

Where the client requires the consulting engineer to, on his behalf, perform the services listed hereunder or similar work, the extent thereof and remuneration therefore is subject to agreement between the client and the consulting engineer:

- (1) Dealing with matters of law, obtaining parliamentary or other statutory approval, licenses or permits.
- (2) Assisting with or participating in contemplated or actual mediation, arbitration or litigation proceedings.
- (3) Officiating at or attending courts and commissions of enquiry, select committees and similar bodies convened by statute, regulation or decree.

4. GUIDELINE TARIFF OF FEES

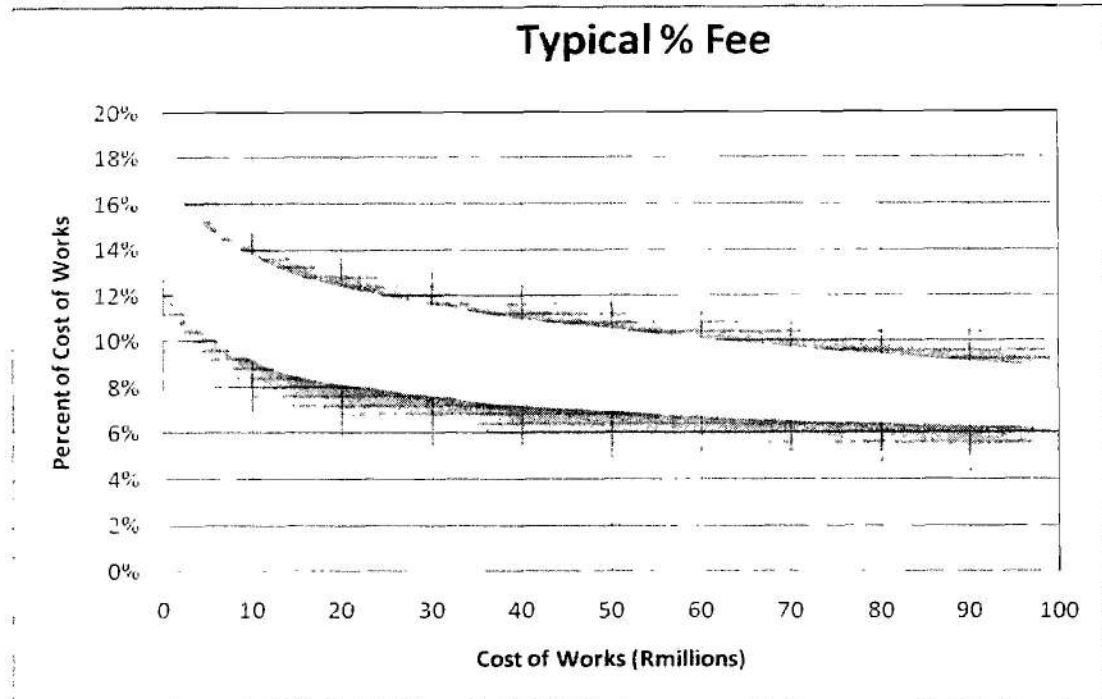
4.1 Application of Tariff of Fees

- (1) The guideline tariff of fees contained in this Schedule applies in respect of the services set out in clause 3.
- (2) The client should remunerate the consulting engineer, for the services rendered, on the basis of clauses 4.2 to 4.5. In cases where the client and consulting engineer have agreed that clauses 4.2 and 4.3 are not applicable, payment should be on the basis of clause 4.4 or as agreed according to clause (4).
- (3) The client shall reimburse the consulting engineer for all expenses and costs incurred in terms of clause 4.5 in performing his services, irrespective of whether fees are charged in terms of clauses 4.2 and 4.3 or clause 4.4, as well as for all costs incurred on behalf, and with the approval, of the client.
- (4) While the tariff of fees contained in this Schedule can be applied to many projects the factors that influence the fees to be paid for design services on a project are complex and depend on a number of contributing factors. These contributing factors that should be taken into account may include, inter alia, all or any of the following:
 - (a) Project complexity: Projects may range from relatively simple projects where the designs are based on well established, common practices to more complex projects where the works call for the application of new, unusual or untried techniques, designs, systems or applications.
 - (b) Monetary value of the works: This may range from a situation where the value of the work is very high relative to the services being rendered to a project where the value of the works is abnormally low relative to the services required from the consulting engineer.
 - (c) Time duration: This may involve projects where the works are executed over appreciably shorter or longer periods than would normally be expected for any of the stages defined in 3.1.
 - (d) Level of responsibility, liability and risk: These may range from relatively low levels of responsibility and/or risks to projects with unusually high responsibilities and/or risks that are expected to be carried by the consulting engineer.
 - (e) Level of expertise, qualifications, skills and experience: Some works do not require a high degree of expertise while other works may require more specialized expertise or substantial skills and experience that cost more to develop and retain.
 - (f) Level of technology required and changes in technology that may influence the costs of the services provided
 - (g) Level of effort: Some projects do not call for substantial effort as the works can be designed without extensive investigations or field measurements while others may call for unusually high effort on the part of the consulting engineer because of, for example, research required or integration with existing works or repairs to existing infrastructure where the status quo needs to be investigated in considerable detail and these need to be accommodated within the design.
 - (h) Potential value added: In some instances the design, no matter how sophisticated will not add much value to the overall project while in other cases greater design optimization can lead to considerable savings in capital, maintenance or operations costs, or add value to the final project.
 - (i) Client Requirements: Some clients have relatively few requirements and/or many standard details and the consulting engineer's designs are accepted at face value. Other clients require considerable details to be investigated during design development to satisfy their own, often complex, internal processes.

- (j) **Business Strategy:** Some firms may decide to offer a low price to enter a market segment at a low cost or to keep employees busy while waiting for economic upswings.
 - (k) **Project Definition:** In some projects the design concept and scope is self evident and does not require much further investigation and analysis of options, while in other projects the design development requires extensive analysis and testing of various options.
- (5) Combinations of one or more of the above factors may result in a substantial adjustment of the tariff that is required to fairly compensate the consulting engineer and this adjustment factor should be negotiated in good faith by both parties.
 - (6) Agreement on any adjustment of or special fees should be reached at the time of the engagement of the consulting engineer or as soon after circumstances warrant such as practically possible, but in all cases prior to the consulting engineer rendering services which may be affected.
 - (7) Where the normal services relate to more than one of the disciplines of consulting engineering contemplated in clauses 4.2.1 to 4.2.8, namely civil, structural, mechanical, electrical or electronic engineering services, a separate fee for services in each discipline should be calculated in accordance with the relevant clause.
 - (8) Where at the instance and with the consent of the client the works are undertaken on separate non-contiguous sites, continuity is interrupted or are unusually fragmented or are constructed as separately documented phases or sections, the fee for **normal services** is:
 - (a) the sum of the fees calculated separately for each site, contract, phase or section as if they were separate works; or
 - (b) a fee agreed to between the client and the consulting engineer and which fee lies between the fee calculated on the total cost of the works and the sum of the fees contemplated in clause (a) above.
 - (9) For the calculation of fees, "Duplication of works" is defined as the re-use of designs, drawings and details done by a consultant to duplicate a complete unit (e.g. a building or bridge).
 - (10) The fee for services provided in the report stage is calculated on a time basis.
 - (11) The following fees may be claimed after each stage of services or monthly or as agreed between the consulting engineer and the client:
 - (a) Percentage fees determined on the basis of the **cost of the works** prevailing at the time of the fee calculation and pro-rata to the completed **services**, or a portion of the total fee based on completion of the stages along the lines indicated in 4.2.9.
 - (b) Time based fees applicable when the services were rendered.
 - (12) Disbursements as set out in clause (3) may be claimed monthly.

4.2 Fees for Normal Services

A convenient way to express the fee payable if the scope of work is uncertain is to use a percentage fee based on the cost of the Works. The typical range of percentage fees applicable to different size projects and services provided are shown in the graph below.



The graph shows that the fee can range from 6% for a large project up to 20% for a small project. The fee can also fall within the shadowed area on either side of the band depending on the complexity factors that are expanded upon in paragraph 4.1. These factors are normally converted into multipliers that range from 0.3 to 1.5 and that are applied to modify the overall percentage fee and agree on a fair and reasonable fee for the service to be provided.

In the following tables the fee guidelines consist of the sum of a primary and secondary fee depending on the Cost of the Works. Alternatively, if the scope of services and scope of work are relatively well defined and a reasonable budget of the Cost of Works is available, then the client and consultant can agree a single percentage fee based on this budgeted cost and the overall fee calculated using the tables below as well as any relevant complexity factors.

For example, if the project involves alterations with complex structural engineering and a reasonable expectation of the Cost of the Works is R30million then the fee calculated using the tables would be:

Fee from 4.2.1: = R2 392 500 + 6% * R2 500 000 = R2 542 500 for normal civil works

Plus R 968 000 + 2% * R2 500 000 = R1 018 000 additional for structures

Therefore total = R3 560 500

Multiplied by a complexity factor for additions to existing buildings of 1.25 = R4 450 625 which is equal to a percentage fee of: R4 560 625/ R30 000 000 = 14.8%

Alternatively, consider the example of a relatively simple rural road project with a reasonable budget value of R20 000 000. Then the fee calculated using the tables would be:

Fee from 4.2.1: = R 1 072 500 + 8% * R 9 000 000 = R1 792 500

Multiplied by a complexity factor of 0.85 for rural roads = R1 523 625 which is equal to a percentage fee of: R1 523 625/ R20 000 000 = 7.6%

Fee negotiations would typically commence using these starting values and judgement regarding project complexity to arrive at a finally agreed percentage fee. The fee amount to be paid will generally be based upon the final cost of the works or any other suitably agreed arrangement.

4.2.1 Civil and Structural Engineering Services pertaining to Engineering Projects

- (1) The basic fee for normal services in the disciplines of civil and structural engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which is normally reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R 1 100 000	R 55 000	12,5% on the balance over R 440 000
R 1 100 000	R 5 500 000	R 137 500	10,0% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 577 500	9,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 072 500	8,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 392 500	6,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 4 042 500	5,5% on the balance over R 55 000 000
R 330 000 000		R 19 167 000	5,0% on the balance over R 330 000 000

- (2) The following additional fee is typically applicable to the value of the reinforced concrete and structural steel portions of the works, inclusive of the costs of concrete, reinforcing, formwork, structural steel work and any pro-rata preliminary and general amounts. Where structures of identical design are repeated on the same project, the combined costs is normally cumulated for the determination of the cost of the reinforced concrete and structural steel works. In cases where structures require individual design, a separate additional fee is normally calculated for each structure based on the cost of the reinforced concrete and/or structural steel work for that particular structure. The additional fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project as shown below.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R 1 100 000	R 22 000	5,0% on the balance over R 440 000
R 1 100 000	R 5 500 000	R 55 000	4,5% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 253 000	4,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 473 000	3,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 968 000	2,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 1 518 000	1,5% on the balance over R 55 000 000
R 330 000 000		R 5 643 000	1,5% on the balance over R 330 000 000

- (3) To calculate the fee for railway track work in terms of this item, 50 per cent of the cost of the permanent way materials is normally excluded from the cost of the works **in view of the limited design input normally required for these elements**, but the full cost of ballast and equipment specially designed by the consultant is normally included in the cost of the works.
- (4) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) and (2) is normally multiplied by the category factors mentioned against that description in the second column of the table. In cases more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.
- (5) These factors do not apply when fees are a lump sum or on a time basis.
- (6) In the case of road works, where the road traverses both rural and urban areas, an adjustment pro-rata to the length of road in rural and urban area is normally made.
- (7) In the case of road rehabilitation a combination of factors applies depending on the situation of the road (rural or urban) and the category factor for alterations to existing works.

Description of the Works	Typical factor by which basic fee is multiplied
Rural roads (single carriageways), excluding bridges	0,85
Rural freeways and dual carriageways, excluding bridges	0,95
Freeways and dual carriageways through existing peri-urban areas, excluding bridges	1,00
Single Carriageways through existing urban areas	1,00
Freeways and dual carriageways through existing urban areas	1,25
Gravel roads: Primary roads Secondary roads Informal roads	1,25 to 1,50 1,00 to 1,25 0,75 to 1,00
Water and waste water treatment works	1,25
Services (Excluding roads) for existing informal settlements including roads and to reduced standards or supplies	1,25 to 1,50
Water and sanitation in rural areas	1,35
Alterations to existing works. (Only applicable to the fees on the portion or section of works affected)	1,25
Mass concrete foundations, brickwork and cladding designed and detailed by the consulting engineer (Only applicable to the design portion of the fees on such works)	0,33
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0, 07

4.2.2 Civil Engineering Services pertaining to Building Projects

- (1) The basic fee for normal services in the discipline of civil engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which is normally reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R 1 100 000	R 55 000	12,5% on the balance over R 440 000
R 1 100 000	R 5 500 000	R 137 500	10,0% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 577 500	9,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 072 500	8,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 392 500	7,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 4 317 500	7,0% on the balance over R 55 000 000
R 330 000 000		R 23 567 500	7,0% on the balance over R 330 000 000

- (2) For normal services relating to a description of the **works** mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Internal water and drainage for buildings upon specific agreement with the client to render such services	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25

4.2.3 Structural Engineering Services pertaining to Building Projects

- (1) The basic fee for normal services in the discipline of structural engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which shall be reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R1 100 000	R 55 000	12,5% on the balance over R 440 000
R1 100 000	R 5 500 000	R 137 500	10,0% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 577 500	9,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 072 500	8,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 392 500	7,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 4 317 500	7,0% on the balance over R 55 000 000
R 330 000 000		R 23 567 500	7,0% on the balance over R330 000 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Mass concrete foundations and brickwork designed and cladding designed and detailed by the consulting engineer (Only applicable to the design portion of the fees on such works)	0,33
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25

4.2.4 Mechanical Engineering Services pertaining to Engineering Projects

- (1) The basic fee for normal services in the discipline of mechanical engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which shall be reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R1 100 000	R 55 000	12,5% on the balance over R 440 000
R1 100 000	R 5 500 000	R 137 500	10,0% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 577 500	8,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 017 500	7,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 172 500	6,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 3 822 500	5,5% on the balance over R 55 000 000
R 330 000 000		R 18 947 500	5,5% on the balance over R330 000 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected.)	1,25
Wet services, for domestic hot and cold water and drainage pipe work inside buildings.	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0, 07

4.2.5 Electrical Engineering Services pertaining to Engineering Projects

- (1) The basic fee for normal services in the discipline of electrical engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which shall be reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R1 100 000	R 55 000	12,5% on the balance over R 440 000
R1 100 000	R 5 500 000	R 137 500	10,0% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 577 500	8,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 017 500	7,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 172 500	6,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 3 822 500	5,5% on the balance over R 55 000 000
R 330 000 000		R 18 947 500	5,5% on the balance over R330 000 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected.)	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

4.2.6 Mechanical Engineering pertaining to Building Projects

- (1) The basic fee for normal services in the discipline of mechanical engineering or wet services, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which shall be reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R 1 100 000	R 66 000	15,0% on the balance over R 440 000
R 1 100 000	R 5 500 000	R 165 000	12,5% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 715 000	10,5% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 292 500	9,5% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 860 000	9,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 5 335 000	8,5% on the balance over R 55 000 000
R 330 000 000		R 28 710 000	8,5% on the balance over R 330 000 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Wet services, for domestic hot and cold water and drainage pipe work inside buildings.	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities for are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contracts, etc.)	0,90

Description of the Works	Typical factor by which basic fee is multiplied
Targeted Procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

4.2.7 Electrical Engineering services pertaining to Building Projects

- (1) The basic fee for normal services in the discipline of electrical engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which shall be reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R 1 100 000	R 66 000	15,0% on the balance over R 440 000
R 1 100 000	R 5 500 000	R 165 000	12,5% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 715 000	10,5% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 292 500	9,5% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 2 860 000	9,0% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 5 335 000	8,5% on the balance over R 55 000 000
R 330 000 000		R 28 710 000	8,5% on the balance over R330 000 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contracts, etc.)	0,90
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

4.2.8 Electronic Engineering Services

- (1) The basic fee for normal services in the discipline of electronic engineering, including work pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.1.1 which shall be reimbursed on a time basis in terms of clause 4.4.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R1 100 000	R 74 800	17,0% on the balance over R 440 000
R1 100 000	R 5 500 000	R 187 000	13,5% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 781 000	11,5% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 1 413 500	10,0% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 3 063 500	9,5% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 5 676 000	8,5% on the balance over R 55 000 000
R 330 000 000		R 29 051 000	8,5% on the balance over R330 000 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Where equipment or systems are wholly of proprietary design or approved by a State authority (Only applicable to the design portion of the fees)	0,67
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 440,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities for electronic works are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contract, etc.)	0,90
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

4.2.9 Services provided partially or in Stages

- (1) The following table shows typical percentages that are typically used for proportioning the basic fee for normal services over the various stages of the services. The actual percentage used should be adjusted for individual projects through negotiation and depending on the work involved in each stage, the value that can be added in each stage and any commercial considerations that may be applicable:

<i>Stage of Services</i>	<i>Typical percentage points for each stage</i>
Civil: Engineering Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 15 20 5
Structural: Engineering Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 20 15 5
Civil: Building Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 15 20 5
Structural: Building Projects: Preliminary design Design and tender Working drawings Construction Completion of all consulting engineering services	30 30 20 15 5
Mechanical, electrical and electronic projects: Preliminary design Design and tender, including working drawings Construction Completion of all consulting engineering services	20 40 35 5

- (2) Where not all the stages of the normal services are provided by the consulting engineer, the fee is, subject to clause 4.1(7), calculated as a percentage of the total fee calculated in terms of this clause, which percentage is the sum of the percentage points appropriate to each stage as set out in the above table against those stages of the services provided by the consulting engineer, typically plus 10 percentage points to allow the engineer to become familiar with the project.

4.3 Fees for Additional Services

- (1) The fees for additional services, contemplated in clause 3.2, are agreed to between the client and the consulting engineer as set out in clause 4.1.
- (2) Should instructions having been given by the client to the consulting engineer to proceed with any of the stages of services set out in clause 3 and the whole or part of the works is **cancelled or abandoned or postponed for a period of more than six months**, the consulting engineer shall be remunerated for services performed, plus a surcharge of one tenth of the full fee which would have been payable to the consulting engineer had his services been completed in terms of his engagement.
- (3) For additional **services** as a result of the resumption of such services or the alteration or modification of designs on the instructions of the **client**, the **consulting engineer** is entitled to time based fees and actual costs incurred.
- (4) For the provision of a **construction monitoring service**, as contemplated in clause 3.2.2, the consulting engineer is typically entitled to recover from the client
 - (a) for monthly monitoring staff costs, the **total annual cost of employment** of such staff (as defined in clause 4.4(4)), divided by 12 and multiplied by one of the following:
 - (i) Case 1: Where payment is only made for actual time on site and site allowances are not paid separately:
2.1 times total cost of employment.
 - (ii) Case 2: Where payment is only made for actual time on site and site allowances are paid separately:
2.0 times total cost of employment.
 - (iii) Case 3: Where payment is made for leave and non-working days and site allowances are paid separately:
1.8 times total cost of employment.
 - (b) for part time monitoring staff costs, the amount payable to such staff at the hourly rates contemplated in clause 4.4; and
- (5) For all other costs, as set out in clause 4.5 the actual expenses incurred, multiplied by 1.10.
- (6) For duties under the **Occupational Health and Safety Act**, 1993 (Act No.85 of 1993), as contemplated in clause 3.2.3, the consulting engineer shall, if so appointed by the client, be remunerated on a time and cost basis as agreed with the client.
- (7) For services as **lead consulting engineer**, as contemplated in clause 3.2.5, the lead consulting engineer is typically entitled to an additional fee of 10 percent (10%) of the total fees payable for the services.
- (8) For services as **principal agent of the client**, as contemplated in clause 3.2.6, the consulting engineer is typically entitled to an additional fee calculated at one percentage point (1%) of the total cost of the works comprising the project. The consulting engineer is not entitled to any fees for principal agent if he is not explicitly appointed as such.
- (9) For **engineering management services**, as contemplated in clause 3.2.7, the consulting engineer will typically be remunerated as follows:
 - (a) The basic fee for services in the discipline of engineering management services, including work pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 440 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 440 000	R1 100 000	R 19 800	4,5% on the balance over R 440 000
R1 100 000	R 5 500 000	R 49 500	3,5% on the balance over R 1 100 000
R 5 500 000	R 11 000 000	R 203 500	3,0% on the balance over R 5 500 000
R 11 000 000	R 27 500 000	R 368 500	2,5% on the balance over R 11 000 000
R 27 500 000	R 55 000 000	R 781 000	1,5% on the balance over R 27 500 000
R 55 000 000	R 330 000 000	R 1 193 500	1,5% on the balance over R 55 000 000
R 330 000 000		R 5 318 500	1,5% on the balance over R330 000 000

- (b) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific calculated in terms of clause (a) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved, except for the fee for targeted procurement.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors)	0,07

- (c) The following table is typically used to proportion the basic fee over the various stages of the services:

Stage of Services	Typical percentage points for each stage
Concept and design development	25
Design, documentation and tender	35
Construction	35
Completion of all engineering management services	5

4.4 Time Based Fees

- (1) Time based fees are all-inclusive fees, including allowances for overhead charges incurred by the consulting engineer as part of normal business operations, including the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general and not on a specific project only.
- (a) Time based fees are calculated by multiplying the hourly rate contemplated in clause 4.4, which is applicable to the consulting engineer or any other technical staff employed by the consulting engineer, with the actual time spent by such technical staff in rendering the services required by the client.
 - (b) Technical staff include all staff performing work directly related to the execution of the services the consulting engineer is engaged for by the client and excludes all administrative, clerical and secretarial staff used to support professional and technical staff in general and not on a specific project only, but includes the typing of letters, minutes, reports and documents for projects.
- (2) To determine the time based fee rates the persons concerned are divided into:-
- (a) Category A, in respect of a private consulting practice in engineering, shall mean a top practitioner whose expertise and relevant experience is nationally or internationally recognized and who provides advice at a level of specialization where such advice is recognized as that of an expert.
 - (b) Category B, in respect of a private consulting practice in engineering, shall mean a partner, a sole proprietor, a director, or a member who, jointly or severally with other partners, co-directors or co-members, bears the risks of the business, takes full responsibility for the liabilities of such practice, where level of expertise and relevant experience is commensurate with the position performs work of a conceptual nature in engineering design and development, provides strategic guidance in planning and executing a project and/or carries responsibility for quality management pertaining to a project.
 - (c) Category C, in respect of a private consulting practice in engineering, shall mean all salaried professional staff with adequate expertise and relevant experience performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to a project. A person referred to in Category B may also fall in this category if such person performs work of an engineering nature at this level.
 - (d) Category D, in respect of a private consulting practice in engineering, shall mean all other salaried technical staff with adequate expertise and relevant experience performing work of an engineering nature with direction and control provided by any person contemplated in categories A, B or C.
- (3) The time based fee rates are:-
- (a) Calculated for a person in category-
 - (i) A and B at 22, 00 cents per hour;
 - (ii) C at 17, 5 cents per hour; and
 - (iii) D at 16, 5 cents per hour,for each R100 or part thereof of the **total annual cost of employment** of the person concerned, as contemplated in sub-clause (4); or
 - (b) based on such indicative time based fee rates as are determined from time to time by the Engineering Council of South Africa after consultation with service providers and service users: Provided that in all cases the client and consulting engineer may agree on a more appropriate fee to take account of the specific services to be rendered or expertise to be applied.

- (4) For the purposes of clause 4.4, the **total annual cost of employment** of a person means the total amount borne by an employer in respect of the employment of such a person per year, calculated at the amounts applicable to such a person at the time when the services are rendered, including –
- (a) Basic salary or a nominal market related salary, excluding profit share and asset growth;
 - (b) Fringe benefits not reflected in the basic salary, including:
 - (i) Normal annual bonus;
 - (ii) Employer's contribution to medical aid;
 - (iii) Group life insurance premiums borne by the employer;
 - (iv) Employer's contribution to a pension or provident fund; and
 - (v) All other benefits or allowances payable in terms of a letter of appointment, including any transportation allowance or company vehicle benefit, telephone and/or computer allowances, etc; and
 - (c) Amounts payable in terms of an Act, including:
 - (i) Contributions to the Compensation Fund in terms of the Compensation for Occupational Injuries and Diseases Act;
 - (ii) Contributions to unemployment insurance in terms of the Unemployment Insurance Fund Act;
 - (iii) Levies in terms of the Skills Development Levy Act, and
 - (iv) Recoverable levies to all spheres of government.

4.5 Expenses and Costs

- (1) Subject to clause 4.3(4) a consulting engineer shall recover from the client:
- (a) All expenses actually incurred by the consulting engineer and members of the consulting engineer's staff in rendering their services; and
 - (b) All other costs incurred on behalf of and with approval of the client, plus a mark-up of 10 per cent.
- (2) Recoverable expenses include:
- (a) Travelling expenses for the conveyance of the consulting engineer or a member of the consulting engineer's staff by means of:
 - (i) private motor transport, including any parking charges, toll fees and related expenses;
 - (ii) a scheduled airline or a train, bus, taxi or hired car; or
 - (iii) non-scheduled or privately owned air transport.
 - (b) Travelling time on the basis of the rate set out in clause 4.4, for all time spent in travelling by the consulting engineer or members of his staff shall be as follows:
 - (i) when fees are paid on a time basis, all hours spent on travelling are reimbursable.
 - (ii) when fees are paid on a percentage basis, reimbursement for travelling time shall be for all time spent in travelling minus the first hour per return journey.
 - (c) Accommodation and subsistence expenses incurred by the consulting engineer or a member of his staff;

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- (d) Agreed costs of typing, production, copying and binding of contract documents, pre-qualification documents, feasibility reports, preliminary design reports, final reports and manuals, excluding general correspondence, minor reports, contractual reports, progress reports, etc.
 - (e) Expenses on special reproductions, copying, printing, artwork, binding and photography, etc. requested by the **client**.
 - (f) Alternatively, a lump sum or percentage of the **cost of the works** may be determined and agreed between the **consulting engineer** and the **client** to cater for all or any of the above.
- (3) Costs that shall be recovered under clause (1)(b) above include, but are not limited to:
- (a) Site traffic surveys;
 - (b) Geotechnical investigations;
 - (c) Laboratory testing;
 - (d) Topographical and land surveys;
 - (e) Supply of specific equipment;
 - (f) Specialist sub-consultants;
 - (g) Environmental investigations and studies; and
 - (h) Land acquisitions, expropriation, way leaves, and servitudes.
-