

C2.2 Activity Schedule

C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider

PROFESSIONAL SERVICES IN CONSORTIUM

SUMMARY ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR ALL PROFESSIONAL SERVICES COMPRISING THE SERVICE PROVIDER

Tenderer's Tender for Value Based Fees for:

PROFESSIONAL SERVICE	*Percentage of respective normal fees tendered by professional service	*Financial Offer by Tenderer for Value Based Fees
1. Architectural Services	% (b)	R (14)
2. Quantity Surveying Services	% (d)	R (28)
3. Civil Engineering Services	% (f)	R (43)
4. Electrical Engineering Services	% (h)	R (58)
5. Mechanical Engineering Services	% (j)	R (73)
6. Structural Engineering Services	% (l)	R (88)
Sub-total		R (89)
Add VAT @ 15%		R (90)
<u>TOTAL FINANCIAL OFFER FOR VALUE BASED FEES</u>₍₈₉₊₉₀₎		R (91)

[* Mark "N/A" should the specific professional Service comprising the Service Provider not be required (not listed in C1.1 Form of Offer and Acceptance).]

NOTE: 1. Total Financial Offer for Value Based Fees, (91) above, **must be carried over to C1.1 Form of Offer and Acceptance**. Failure to carry this amount over to the Form of Offer and Acceptance **will render the Bid Non-responsive** as the Form of Offer **must be fully** completed.

C2.2.A Activities for architects

- C2.2.A.1** The services as defined in the C3 Scope of Services are required. The activity schedule below lists the normal services as defined in the 2015 NDPWI - Scope of Architectural Services and Tariff of Fees (Annexure B), clause 3 and as further defined in C3 Scope of Services, as well as additional services as defined in C3 Scope of Services, of this document.
The applicable fee scale will only be amended to the latest fee scale in use by NDPWI should the project be suspended or where there is no activity for more than two (2) years, and the Employer elects to retain the services of the Service Provider upon uplifting the Suspension in terms of Clause 8.5.1 of the Contract Data.
- C2.2.A.2** The estimated normal fees have been calculated using the 2015 NDPWI - Scope of Architectural Services and Tariff of Fees, (Annexure B), by applying the applicable fee scale given in clause A, to determine the basic fee.

No allowance has been made in the estimated normal fees below for the additional services in C2.1.3.A.7 that have been specified to be included in the normal fees. The tenderer shall make provision for the cost of the additional services that are to be included under normal services by adjusting the percentage tendered in column (b).
- C2.2.A.3** The services are to be provided in stages and the proportioning of the fee for normal services over the various stages shall be as set out in the 2015 NDPWI - Scope of Architectural Services and Tariff of Fees, (Annexure B), clause 8.3.
- C2.2.A.4** The tenderer must make provision for all activities necessary for the execution of the service as set out in C3 Scope of Services hereof.

ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR ARCHITECTS

Tenderer's Tender for Value Based Fees for Architects

Fee for Normal Services Inclusive of certain additional services as specified in C2.1.3.A.7

Latest estimate of cost of construction	(a) Estimated normal fees calculated according to C2.1.2.2 and C2.1.3.A.1 above	X	(b) Percentage of normal fees tendered by Tenderer	(a)x(b) Financial Offer by Tenderer for Value Based Fees
R9 070 910.00	R778 388.60	X	%	= R (1)

Additional Services – C2.1.3.A.7				
Description	Quantity	Unit	Rate	Value
n/a	(type in quantity required)		R	= R (2)
n/a		hours	R	= R (3)
Sub-total Additional Services (2+3)				= R (4)
Supplementary Services				
n/a		hours	R	= R (5)
Total Additional and Supplementary Services (4+5)				= R (6)
Appointment of sub-consultants / specialists				
n/a	Provisional Sum	-	-	= R (7)
n/a	Provisional Sum	-	-	= R (8)
Sub-total Sub-consultants / Specialists (7+8)				= R (9)

Administration of Sub-consultants/ Specialists	= R	(10)
Total Sub-consultants / Specialists (9 +10)	R	(11)
Total Travelling Disbursements (Table A below)	R	(12)
Contract Skills Development Goal Cost	R	(13)
<u>TOTAL FINANCIAL OFFER FOR VALUE BASED FEES FOR ARCHITECTS (VAT EXCLUDED)</u> Sub-total Discounted fees + Total Additional and Supplementary Services + Total Sub-consultants/ Specialists + Total Travelling Disbursements + Contract Skills Development Goal C (1+6+11+12+13)	R	(14)

- NOTE:**
1. The total Financial Offer for Value Based Fees for Architects (VAT excluded), (14) above, as well as the percentage of normal fees tendered, (b) above, **must be carried over to C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider, the total of which must then be carried over to C1.1 Form of Offer and Acceptance. Failure to carry this amount over to the Form of Offer and Acceptance will render the Bid Non-responsive** as the Form of Offer **must be fully** completed.
 2. Remuneration for value based appointments will be calculated as determined in C2.1.2 (i.e. the percentage of the normal fee tendered multiplied by the value fee scale *vis-à-vis* the actual cost of construction) **duly excluding any fee increase/decrease factors as described in 2015 NDPWI - Scope of Architectural Services and Tariff of Fees.** The percentage of the normal fee shall apply to each stage for services provided in stages.
 3. **Supplementary Services:** Where applicable, the Service Provider will be remunerated at an hourly rate as tendered (Based on detailed time sheets) for administration in terms of time spent in liaising, coordinating, sourcing and verification of documents submitted including related meetings pertaining to and submitting reports as required to the following Targeted Procurement and Contract Participation Goals applicable to the Construction Project which shall include but not be limited to: SMME contract participation, EPWP and NYS labour reporting, the use of Local Material and Content, the cidb B.U.I.L.D. Programme and any other Contract Participation Goals applicable to the construction project. The hourly rate will be adjusted in accordance with Clause 3.16.1 of the cidb Standard Professional Service Contract and Clause 3.16.2 of the Contract Data.
 4. Time spent on travelling, as well as any other travel related expenses such as travelling costs, subsistence allowance and accommodation is deemed to be included in the Traveling Disbursements per return trip to site per (12) above.
 5. In the event of a variation in the Service Contract Period which results in additional travelling over and above the allowed number of trips in Table A, the additional Traveling will be paid in accordance with the "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Department's Website: <http://www.publicworks.gov.za/Consultants.asp> or from the Departmental Project Manager. These expenses are reimbursable at rates applicable on the time of the actual execution of the specific service contract. The first 2 hours of travelling is deductible as per Clause C2.1.4.4.2.
 6. Bidder to provide detailed breakdown of Travelling Disbursements per return trip to site from place of business:

Table A: Summary of Disbursements Tendered

Item	Description	Rate	X	Factor	X	No. of trips	Total (If not applicable insert "NA")
1.	Traveling cost by car	Per Km R	X	Kms per Trip	X		R
2.	Subsistence	Per Trip	X	-	X		R
3.	Travelling Time as per Clause C2.1.4.4.2	Per Hour R	X	Hours per Trip	X		
4.	Other: Specify below (Table B).	R -	X		X		R
5.	Total disbursement carried over to Activity Schedule (12)						R

Table B: Other Disbursements (Attach separate sheet if necessary)

Table B only to be completed should the service provider's office be located in a different province and/or the service provider has to travel by air and/or stay over due to the vast distance between the service provider's office and the construction site, in order to attend site visits and meetings (Attach separate sheet if necessary). Any claim by the service provider in absence of rates will not be entertained except if approved by the Employer's representative prior to incurring the cost.

Item	Description	Rate	X	Qty	Total (If not applicable insert "NA")
1.	Travelling by Air	R	X		R
2.	Car Rental	R	X		R
3.	Accommodation	R	X		R
4.		R	X		R
5.		R	X		R
6.		R	X		R
7.		R	X		R
8.	Total carried over to Table A, Item 4				R

7. Contract Skills Development Goal Cost

The provisional amount allowed for the in the Activity Schedule shall be adjusted upon award and confirmation of the Training Method/s selected by the service provider when beneficiaries have been identified. The Contract Skills Development Goal (CSDG) will be as described in Clause C3.3.13, which is the number of hours of skills development opportunities that a Service Provider must provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The CSDG is expressed in hours, and shall be not less than the professional fees in millions of Rand multiplied by 150 Hours.

8. The Skills Development Participation Costs to be calculated as follows:

8.1 Skills Development

8.1.1 Number of Hours:

Fees (1) excl. VAT = R5.6m

Number of hours skills development required = $R5.6 \times 150 = 840$ hours (hours to be rounded off)

8.2 Calculating the Notional Cost per hour

8.2.1 Notional Cost per quarter as per Table 3 of Clause C3.3.13 (Scope of Services) and optional methods

8.2.2 Number of Hours per quarter = 3 months x 20 days x 8 hours per day = 480 Hours

8.2.3 Notional Cost per Hour = 8.2.1 / 8.2.2

8.3 Calculating the Notional Cost Example:

Fees (1) from Activity Schedule excl. VAT= R5.6 Million

Number of hours skills development required = $R5.6 \times 150 = 840$ hours

Total number of hours per quarter = 40 hours per week x 4 weeks x 3 months = 480 hours

Notional cost per hour "Method 4" = $R71\ 500$ per quarter / 480 hours = R148.95 per hour

Total Notional cost = R148.95 (Rate per hour) x 840 (total number of hours) = R125 118.00

C2.2.Q Activities for quantity surveyors

C2.2.Q.1 The services as defined in the C3 Scope of Services are required. The activity schedule below lists the normal services as defined in the Guideline Tariff of Professional Fees In Respect of Services Rendered by a Quantity Surveyor in Private Practice (the 2015 Guideline Tariff of Professional Fees), clauses 10.6, and as further defined in C3 Scope of Services, as well as additional services as defined in C3 Scope of Services, of this document.

The applicable fee scale will only be amended to the latest fee scale in use by NDPWI should the project be suspended or where there is no activity for more than two (2) years, and the Employer elects to retain the services of the Service Provider upon uplifting the Suspension in terms of Clause 8.4.1 of the Contract Data.

C2.2.Q.2 The estimated normal fees have been calculated using the 2015 Guideline Tariff of Professional Fees, by applying the applicable fee scale given in clause 2.2, to determine the basic fee. The 2015 Guideline Tariff of Professional Fees is available on the website of The South African Council for the Quantity Surveying Profession.

No allowance has been made in the estimated normal fees below for the additional services in C2.1.3.Q.11 that have been specified to be included in the normal fees. The tenderer shall make provision for the cost of the additional services that are to be included under normal services by adjusting the percentage tendered in column (d).

C2.2.Q.3 The services are to be provided in stages and the proportioning of the fee for normal services over the various stages shall be as set out in the 2015 Guideline Tariff of Professional Fees, clauses 2.7.

C2.2.Q.4 The tenderer must make provision for all activities necessary for the execution of the service as set out in C3 Scope of Services hereof.

ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR QUANTITY SURVEYORS

Tenderer's Tender for Value Based Fees for Quantity Surveyors

Fee for Normal Services Inclusive of certain additional services as specified in C2.1.3.Q.11

Latest estimate of cost of construction	(c) Estimated normal fees calculated according to C2.1.2.2 and C2.1.3.Q.1 above	X	(d) Percentage of normal fees tendered by Tenderer	(c)x(d) Financial Offer by Tenderer for Value Based Fees
R6 667 410	R528 719.82	X	%	= R (15)

Additional Services – C2.1.3.Q.11				
Description	Quantity	Unit	Rate	Value
n/a	(type in quantity required)		R	= R (16)
n/a		hours	R	= R (17)
Sub-total Additional Services (16+17)				= R (18)
Supplementary Services				
n/a		hours	R	= R (19)
Total Additional and Supplementary Services (18+19)				= R (20)
Appointment of sub-consultants / specialists				
n/a	Provisional Sum	-	-	= R (21)
n/a	Provisional Sum	-	-	= R (22)
Sub-total Sub-consultants / Specialists (21+22)				= R (23)
Administration of Sub-consultants/ Specialists				= R (24)
Total Sub-consultants / Specialists (23 +24)				R (25)
Total Travelling Disbursements (Table A below)				R (26)
Contract Skills Development Goal Cost				R (27)
TOTAL FINANCIAL OFFER FOR VALUE BASED FEES FOR QUANTITY SURVEYORS (VAT EXCLUDED) Sub-total Discounted fees + Total Additional and Supplementary Services + Total Sub-consultants/ Specialists + Total Travelling Disbursements + Contract Skills Development Goal Cost (15+20+25+26+27)				R (28)

NOTE: 1. The total Financial Offer for Value Based Fees for Architects (VAT excluded), (28) above, as well as the percentage of normal fees tendered, (d) above, must be carried over to C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider, the total of which must then be carried over to C1.1 Form of Offer and Acceptance. Failure to carry this amount over to the Form of Offer and Acceptance will render the Bid Non-responsive as the Form of Offer must be fully completed.

2. Remuneration for value based appointments will be calculated as determined in C2.1.2 (i.e. the percentage of the normal fee tendered multiplied by the value fee scale *vis-à-vis* the actual cost of construction) **duly excluding any fee increase/decrease factors as described in the 2015**

Guideline Tariff of Professional Fees.. The percentage of the normal fee shall apply to each stage for services provided in stages.

3. **Supplementary Services:** Where applicable, the Service Provider will be remunerated at an hourly rate as tendered (Based on detailed time sheets) for administration in terms of time spent in liaising, coordinating, sourcing and verification of documents submitted including related meetings pertaining to and submitting reports as required to the following Targeted Procurement and Contract Participation Goals applicable to the Construction Project which shall include but not be limited to: SMME contract participation, EPWP and NYS labour reporting, the use of Local Material and Content, the cidb B.U.I.L.D. Programme and any other Contract Participation Goals applicable to the construction project. The hourly rate will be adjusted in accordance with Clause 3.16.1 of the cidb Standard Professional Service Contract and Clause 3.16.2 of the Contract Data.
4. Time spent on travelling, as well as any other travel related expenses such as travelling costs, subsistence allowance and accommodation is deemed to be included in the Traveling Disbursements per return trip to site per (26) above.
5. In the event of a variation in the Service Contract Period which results in additional travelling over and above the allowed number of trips in Table A, the additional Traveling will be paid in accordance with the "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Department's Website: <http://www.publicworks.gov.za/Consultants.asp> or from the Departmental Project Manager. These expenses are reimbursable at rates applicable on the time of the actual execution of the specific service contract. The first 2 hours of travelling is deductible as per Clause C2.1.4.4.2.
6. Bidder to provide detailed breakdown of Travelling Disbursements per return trip to site from place of business:

Table A: Summary of Disbursements Tendered

Item	Description	Rate	X	Factor	X	No. of trips	Total (If not applicable Insert "NA")
1.	Traveling cost by car	Per Km R	X	Kms per Trip	X		R
2.	Subsistence	Per Trip R	X		X		R
3.	Travelling Time as per Clause C2.1.4.4.2	Per Hour R	X	Hours per Trip	X		
4.	Other: Specify below (Table B).	R -	X		X	-	R
5.	Total disbursement carried over to Activity Schedule (26)						R

Table B: Other Disbursements (Attach separate sheet if necessary)

Table B only to be completed should the service provider's office be located in a different province and/or the service provider has to travel by air and/or stay over due to the vast distance between the service provider's office and the construction site, in order to attend site visits and meetings (Attach separate sheet if necessary). Any claim by the service provider in absence of rates will not be entertained except if approved by the Employer's representative prior to incurring the cost.

Item	Description	Rate	X	Qty	Total (If not applicable Insert "NA")
1.	Travelling by Air	R	X		R
2.	Car Rental	R	X		R
3.	Accommodation	R	X		R
4.		R	X		R
5.		R	X		R
6.		R	X		R
7.		R	X		R
8.	Total carried over to Table A, Item 4				R

7. Contract Skills Development Goal Cost

The provisional amount allowed for the in the Activity Schedule shall be adjusted upon award and confirmation of the Training Method/s selected by the service provider when beneficiaries have been identified. The Contract Skills Development Goal (CSDG) will be as described in Clause C3.3.13, which is the number of hours of skills development opportunities that a Service Provider must provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The CSDG is expressed in hours, and shall be not less than the professional fees in millions of Rand multiplied by 150 Hours.

8. The Skills Development Participation Costs to be calculated as follows:

8.1 Skills Development

8.1.1 Number of Hours:

Fees (1) exlc. VAT = R5.6m

Number of hours skills development required = $R5.6 \times 150 = 840$ hours (hours to be rounded off)

8.2 Calculating the Notional Cost per hour

8.2.1 Notional Cost per quarter as per Table 3 of Clause C3.3.13 (Scope of Services) and optional methods

8.2.2 Number of Hours per quarter = 3 months x 20 days x 8 hours per day = 480 Hours

8.2.3 Notional Cost per Hour = $8.2.1 / 8.2.2$

8.3 Calculating the Notional Cost Example:

Fees (1) from Activity Schedule excl. VAT= R5.6 Million

Number of hours skills development required = R5.6 x 150 = 840 hours

Total number of hours per quarter = 40 hours per week x 4 weeks x 3 months = 480 hours

Notional cost per hour "Method 4" = R71 500 per quarter / 480 hours = R148.95 per hour

Total Notional cost = R148.95 (Rate per hour) x 840 (total number of hours) = R125 118.00

C2.2.C Activities for civil engineers

C2.2.C.1 The services as defined in C3 Scope of Services are required. The activity schedule below lists the normal services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (Annexure A), clause 3 and as further defined in C3 Scope of Services, as well as additional services as defined in C3 Scope of Services, of this document. (The clause references refer to the corresponding clauses in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.)

The applicable fee scale will only be amended to the latest fee scale in use by NDPWI should the project be suspended or where there is no activity for more than two (2) years, and the Employer elects to retain the services of the Service Provider upon uplifting the Suspension in terms of Clause 8.5.1 of the Contract Data.

C2.2.C.2 The estimated normal fees have been calculated using the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), by applying the applicable fee scale given in clause 4.2.1 (1)-(2) for an engineering project or clause 4.2.2 (1) for a multi-disciplinary project, to determine the basic fee and by multiplying the basic fee by the applicable multiplication factor given in clause 4.2.1 (4) or clause 4.2.2 (2) respectively. The cost of the works and the values used to determine the multiplication factors are defined in C3.0.4 'Project Cost Estimate'.

No allowance has been made in the estimated normal fees below for the additional services in C2.1.3.En.5 'Additional services' that have been specified to be included in the normal fees. The tenderer shall make provision for the cost of the additional services that are to be included under normal services by adjusting the percentage tendered in column (f) of C2.2.C.4 'Activity schedule for value based fees for civil engineers'.

C2.2.C.2 The services are to be provided in stages and the proportioning of the fee for normal services over the various stages shall be as set out in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), clause 4.2.8.

C2.2.C.3 The tenderer must make provision for all activities necessary for the execution of the service as set out in C3 Scope of Services.

C2.2.C.4 Activity schedule for value based fees for civil engineers

ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR CIVIL ENGINEERS

Tenderer's Tender for Value Based Fees for Civil Engineers

Fee for Normal Services inclusive of certain additional services as specified in C2.1.3.En.5

Latest net estimate of the construction cost for the Civil Works	(e) Estimated normal fees calculated according to C2.1.3.En.1 and C2.2.1.2 above	X	(f) Percentage of normal fees tendered by Tenderer	(e)x(f) Financial Offer by Tenderer for Value Based Fees
R689 000	R79 235.00	X	%	= R (29)

Additional Services – C2.1.3.En.5

Description	Quantity	Unit	Rate	Value
Level One, Part time construction monitoring			R	= R (30)
n/a		hours	R	= R (31)
Sub-total Additional Services (30+31)				= R (32)
Supplementary Services				
n/a		hours	R	= R (33)
Total Additional and Supplementary Services (32+33)				= R (34)

Appointment of sub-consultants / specialists

As direct sub-consultant, to be appointed by the Service Provider, for: geotechnical investigation, complete with test results and foundation recommendations, of the site identified in C3.2.2.2	Provisional Sum	-	-	= R (35)
As direct sub-consultant, to be appointed by the Service Provider, for: Engineering survey of the site identified in C3.2.2.2, including bench mark height, contours, existing structures /	Provisional Sum	-	-	= R (36)

services / topographical detail and verification of corner peg positions – in accordance with the departmental Manual (available on website)					
n/a	Provisional Sum	-	-	= R	(37)
Sub-total Sub-consultants / Specialists (35+36+37)				= R	(38)
Administration of Sub-consultants/ Specialists				= R	(39)
Total Sub-consultants / Specialists (38+39)				R	(40)
Total Travelling Disbursements (Table A below)				R	(41)
Contract Skills Development Goal Cost n/a				R	(42)
<u>TOTAL FINANCIAL OFFER FOR VALUE BASED FEES FOR CIVIL ENGINEERS (VAT EXCLUDED)</u> Sub-total Discounted fees + Total Additional and Supplementary Services + Total Sub-consultants/ Specialists + Total Travelling Disbursements + Contract Skills Development Goal Cost (29+34+40+41+42)				R	(43)

- NOTE:**
1. The total Financial Offer for Value Based Fees for Architects (VAT excluded), (43) above, as well as the percentage of normal fees tendered, (f) above, must be carried over to C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider, the total of which must then be carried over to C1.1 Form of Offer and Acceptance. Failure to carry this amount over to the Form of Offer and Acceptance will render the Bid Non-responsive as the Form of Offer must be fully completed.
 2. Remuneration for value based appointments will be calculated as determined in C2.1.2 (i.e. the percentage of the normal fee tendered multiplied by the value fee scale *vis-à-vis* the actual cost of construction). The percentage of the normal fee shall apply to each stage for services provided in stages.
 3. **Supplementary Services:** Where applicable, the Service Provider will be remunerated at an hourly rate as tendered (Based on detailed time sheets) for administration in terms of time spent in liaising, coordinating, sourcing and verification of documents submitted including related meetings pertaining to and submitting reports as required to the following Targeted Procurement and Contract Participation Goals applicable to the Construction Project which shall include but not be limited to: SMME contract participation, EPWP and NYS labour reporting, the use of Local Material and Content, the cldb B.U.I.L.D. Programme and any other Contract Participation Goals applicable to the construction project. The hourly rate will be adjusted in accordance with Clause 3.16.1 of the cldb Standard Professional Service Contract and Clause 3.16.2 of the Contract Data.
 4. Time spent on travelling, as well as any other travel related expenses such as travelling costs, subsistence allowance and accommodation is deemed to be included in the Traveling Disbursements per return trip to site per (41) above.

5. In the event of a variation in the Service Contract Period which results in additional travelling over and above the allowed number of trips in Table A, the additional Traveling will be paid in accordance with the "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Department's Website: <http://www.publicworks.gov.za/Consultants.asp> or from the Departmental Project Manager. These expenses are reimbursable at rates applicable on the time of the actual execution of the specific service contract. The first 2 hours of travelling is deductible as per Clause C2.1.4.4.2.
6. Bidder to provide detailed breakdown of Travelling Disbursements per return trip to site from place of business:

Table A: Summary of Disbursements Tendered

Item	Description	Rate	X	Factor	X	No. of trips	Total (If not applicable insert "NA")
1.	Travelling cost by car	Per Km R	X	Kms per Trip	X		R
2.	Subsistence	Per Trip R	X	-	X		R
3.	Travelling Time as per Clause C2.1.4.4.2	Per Hour R	X	Hours per Trip	X		
4.	Other: Specify below (Table B).	R -	X		X		R
5.	Total disbursement carried over to Activity Schedule (41)						R

Table B: Other Disbursements (Attach separate sheet if necessary)

Table B only to be completed should the service provider's office be located in a different province and/or the service provider has to travel by air and/or stay over due to the vast distance between the service provider's office and the construction site, in order to attend site visits and meetings (Attach separate sheet if necessary). Any claim by the service provider in absence of rates will not be entertained except if approved by the Employer's representative prior to incurring the cost.

Item	Description	Rate	X	Qty	Total (If not applicable Insert "NA")
1.	Travelling by Air	R	X		R
2.	Car Rental	R	X		R
3.	Accommodation	R	X		R
4.		R	X		R
5.		R	X		R
6.		R	X		R
7.		R	X		R
8.	Total carried over to Table A, Item 4				R

7. Contract Skills Development Goal Cost

The provisional amount allowed for the In the Activity Schedule shall be adjusted upon award and confirmation of the Training Method/s selected by the service provider when beneficiaries have been identified. The Contract Skills Development Goal (CSDG) will be as described in Clause C3.3.13, which is the number of hours of skills development opportunities that a Service Provider must provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The CSDG is expressed in hours, and shall be not less than the professional fees in millions of Rand multiplied by 150 Hours.

8. The Skills Development Participation Costs to be calculated as follows:

8.1 Skills Development

8.1.1 Number of Hours:

Fees (1) excl. VAT = R5.6m

Number of hours skills development required = $R5.6 \times 150 = 840$ hours (hours to be rounded off)

8.2 Calculating the Notional Cost per hour

8.2.1 Notional Cost per quarter as per Table 3 of Clause C3.3.13 (Scope of Services) and optional methods

8.2.2 Number of Hours per quarter = 3 months x 20 days x 8 hours per day = 480 Hours

8.2.3 Notional Cost per Hour = 8.2.1 / 8.2.2

8.3 Calculating the Notional Cost Example:

Fees (1) from Activity Schedule excl. VAT= R5.6 Million

Number of hours skills development required = R5.6 x 150 = 840 hours

Total number of hours per quarter = 40 hours per week x 4 weeks x 3 months = 480 hours

Notional cost per hour "Method 4" = R71 500 per quarter / 480 hours = R148.95 per hour

Total Notional cost = R148.95 (Rate per hour) x 840 (total number of hours) = R125 118.00

C2.2.E Activities for electrical engineers

C2.2.E.1 The services as defined in C3 Scope of Services are required. The activity schedule below lists the normal services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees(annexure A), clause 3 and as further defined in C3 Scope of Services, as well as additional services as defined in C3 Scope of Services, of this document. (The clause references refer to the corresponding clauses in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.)

The applicable fee scale will only be amended to the latest fee scale in use by NDPWI should the project be suspended or where there is no activity for more than two (2) years, and the Employer elects to retain the services of the Service Provider upon uplifting the Suspension in terms of Clause 8.5.1 of the Contract Data.

C2.2.E.2 The estimated normal fees have been calculated using the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), by applying the applicable fee scale given in clause 4.2.6 (1) for an engineering project or clause 4.2.7 (1) for a multi-disciplinary project, to determine the basic fee and by multiplying the basic fee by the applicable multiplication factor given in clause 4.2.6 (2) or clause 4.2.7 (2) respectively. The cost of the works and the values used to determine the multiplication factors are defined in C3.0.4 'Project Cost Estimate'.

No allowance has been made in the estimated normal fees below for the additional services in C2.1.3.En.5 'Additional services' that have been specified to be included in the normal fees. The tenderer shall make provision for the cost of the additional services that are to be included under normal services by adjusting the percentage tendered in column (h) of C2.2.E.4 'Activity schedule for value based fees for electrical engineers'.

C2.2.E.2 The services are to be provided in stages and the proportioning of the fee for normal services over the various stages shall be as set out in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), clause 4.2.8.

C2.2.E.3 The tenderer must make provision for all activities necessary for the execution of the service as set out in C3 Scope of Services.

C2.2.E.4 Activity schedule for value based fees for electrical engineers

ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR ELECTRICAL ENGINEERS**Tenderer's Tender for Value Based Fees for Electrical Engineers****Fee for Normal Services Inclusive of certain additional services as specified in C2.1.3.En.5**

Latest net estimate of the construction cost for the Electrical Works	(g) Estimated normal fees calculated according to C2.1.3.En.1 and C2.2.E.2 above	X	(h) Percentage of normal fees tendered by Tenderer	(g)x(h) Financial Offer by Tenderer for Value Based Fees
R1 958 000.00	R294 972.70	X	%	= R (44)

Additional Services – C2.1.3.En.5

Description	Quantity	Unit	Rate	Value
Level One, Part time construction monitoring			R	= R (45)
n/a		hours	R	= R (46)
Sub-total Additional Services (45+46)				= R (47)
Supplementary Services				
n/a		hours	R	= R (48)
Total Additional and Supplementary Services (47+48)				= R (49)

Appointment of sub-consultants / specialists

n/a	Provisional Sum	-	-	= R (50)
n/a	Provisional Sum	-	-	= R (51)
n/a	Provisional Sum	-	-	= R (52)
Sub-total Sub-consultants / Specialists (50+51+52)				= R (53)
Administration of Sub-consultants/ Specialists				= R (54)
Total Sub-consultants / Specialists (53+54)				R (55)

Total Travelling Disbursements (Table A below)	R	(56)
Contract Skills Development Goal Cost n/a	R	(57)
<u>TOTAL FINANCIAL OFFER FOR VALUE BASED FEES FOR ELECTRICAL ENGINEERS (VAT EXCLUDED)</u> Sub-total Discounted fees + Total Additional and Supplementary Services + Total Sub-consultants/ Specialists + Total Travelling Disbursements + Contract Skills Development Goal Cost (44+49+55+56+57)	R	(58)

- NOTE:**
1. The total Financial Offer for Value Based Fees for Architects (VAT excluded), (58) above, as well as the percentage of normal fees tendered, (h) above, must be carried over to C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider, the total of which must then be carried over to C1.1 Form of Offer and Acceptance. Failure to carry this amount over to the Form of Offer and Acceptance will render the Bid Non-responsive as the Form of Offer must be fully completed.
 2. Remuneration for value based appointments will be calculated as determined in C2.1.2 (i.e. the percentage of the normal fee tendered multiplied by the value fee scale *vis-à-vis* the actual cost of construction). The percentage of the normal fee shall apply to each stage for services provided in stages.
 3. Supplementary Services: Where applicable, the Service Provider will be remunerated at an hourly rate as tendered (Based on detailed time sheets) for administration in terms of time spent in liaising, coordinating, sourcing and verification of documents submitted including related meetings pertaining to and submitting reports as required to the following Targeted Procurement and Contract Participation Goals applicable to the Construction Project which shall include but not be limited to: SMME contract participation, EPWP and NYS labour reporting, the use of Local Material and Content, the cidb B.U.I.L.D. Programme and any other Contract Participation Goals applicable to the construction project. The hourly rate will be adjusted in accordance with Clause 3.16.1 of the cidb Standard Professional Service Contract and Clause 3.16.2 of the Contract Data.
 4. Time spent on travelling, as well as any other travel related expenses such as travelling costs, subsistence allowance and accommodation is deemed to be included in the Traveling Disbursements per return trip to site per (56) above.
 5. In the event of a variation in the Service Contract Period which results in additional travelling over and above the allowed number of trips in Table A, the additional Traveling will be paid in accordance with the "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Department's Website: <http://www.publicworks.gov.za/Consultants.asp> or from the Departmental Project Manager. These expenses are reimbursable at rates applicable on the time of the actual execution of the specific service contract. The first 2 hours of travelling is deductible as per Clause C2.1.4.4.2.
 6. Bidder to provide detailed breakdown of Travelling Disbursements per return trip to site from place of business:

Table A: Summary of Disbursements Tendered

Item	Description	Rate	X	Factor	X	No. of trips	Total (If not applicable Insert "NA")
1.	Traveling cost by car	Per Km R	X	Kms per Trip	X		R
2.	Subsistence	Per Trip R	X	-	X		R
3.	* Travelling Time as per Clause C2.1.4.4.2	Per Hour R	X	Hours per Trip	X		
4.	Other: Specify below (Table B).	R -	X		X		R
5.	Total disbursement carried over to Activity Schedule (56)						R

Table B: Other Disbursements (Attach separate sheet if necessary)

Table B only to be completed should the service provider's office be located in a different province and/or the service provider has to travel by air and/or stay over due to the vast distance between the service provider's office and the construction site, in order to attend site visits and meetings (Attach separate sheet if necessary). Any claim by the service provider in absence of rates will not be entertained except if approved by the Employer's representative prior to incurring the cost.

Item	Description	Rate	X	Qty	Total (If not applicable insert "NA")	
1.	Travelling by Air	R	X		R	
2.	Car Rental	R	X		R	
3.	Accommodation	R	X		R	
4.		R	X		R	
5.		R	X		R	
6.		R	X		R	
7.		R	X		R	
8.	Total carried over to Table A, Item 4					R

7. Contract Skills Development Goal Cost

The provisional amount allowed for the in the Activity Schedule shall be adjusted upon award and confirmation of the Training Method/s selected by the service provider when beneficiaries have been identified. The Contract Skills Development Goal (CSDG) will be as described in Clause C3.3.13, which is the number of hours of skills development opportunities that a Service Provider must provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The CSDG is expressed in hours, and shall be not less than the professional fees in millions of Rand multiplied by 150 Hours.

8. The Skills Development Participation Costs to be calculated as follows:

8.1 Skills Development

8.1.1 Number of Hours:

Fees (1) excl. VAT = R5.6m

Number of hours skills development required = R5.6 x 150 = 840 hours (hours to be rounded off)

8.2 Calculating the Notional Cost per hour

8.2.1 Notional Cost per quarter as per Table 3 of Clause C3.3.13 (Scope of Services) and optional methods

8.2.2 Number of Hours per quarter = 3 months x 20 days x 8 hours per day = 480 Hours

8.2.3 Notional Cost per Hour = 8.2.1 / 8.2.2

8.3 Calculating the Notional Cost Example:

Fees (1) from Activity Schedule excl. VAT= R5.6 Million

Number of hours skills development required = R5.6 x 150 = 840 hours

Total number of hours per quarter = 40 hours per week x 4 weeks x 3 months = 480 hours

Notional cost per hour "Method 4" = R71 500 per quarter / 480 hours = R148.95 per hour

Total Notional cost = R148.95 (Rate per hour) x 840 (total number of hours) = R125 118.00

C2.2.M Activities for mechanical engineers

C2.2.M.1 The services as defined in C3 Scope of Services are required. The activity schedule below lists the normal services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees(annexure A), clause 3 and as further defined in C3 Scope of Services, as well as additional services as defined in C3 Scope of Services, of this document. (The clause references refer to the corresponding clauses in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.)

The applicable fee scale will only be amended to the latest fee scale in use by NDPWI should the project be suspended or where there is no activity for more than two (2) years, and the Employer elects to retain the services of the Service Provider upon uplifting the Suspension in terms of Clause 8.5.1 of the Contract Data.

C2.2.M.2 The estimated normal fees have been calculated using the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), by applying the applicable fee scale given in clause 4.2.4 (1) for an engineering project or clause 4.2.5 (1) for a multi-disciplinary project, to determine the basic fee and by multiplying the basic fee by the applicable multiplication factor given in clause 4.2.4 (2) or clause 4.2.5 (2) respectively. The cost of the works and the values used to determine the multiplication factors are defined in C3.0.4 'Project Cost Estimate'.

No allowance has been made in the estimated normal fees below for the additional services in C2.1.3.En.5 'Additional services' that have been specified to be included in the normal fees. The tenderer shall make provision for the cost of the additional services that are to be included under normal services by adjusting the percentage tendered in column (j) of C2.2.M.4 'Activity schedule for value based fees for mechanical engineers'.

C2.2.M.2 The services are to be provided in stages and the proportioning of the fee for normal services over the various stages shall be as set out in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), clause 4.2.8.

C2.2.M.3 The tenderer must make provision for all activities necessary for the execution of the service as set out in C3 Scope of Services.

C2.2.M.4 Activity schedule for value based fees for mechanical engineers

ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR MECHANICAL ENGINEERS

Tenderer's Tender for Value Based Fees for Mechanical Engineers

Fee for Normal Services inclusive of certain additional services as specified in C2.1.3.En.5

Latest net estimate of the construction cost for the Mechanical Works	(i) Estimated normal fees calculated according to C2.1.3.En.1 and C2.2.M.2 above	X	(j) Percentage of normal fees tendered by Tenderer	(i)x(j) Financial Offer by Tenderer for Value Based Fees
R633 953.00	R109 356.85	X	%	= R (59)

Additional Services – C2.1.3.En.5

Description	Quantity	Unit	Rate	Value
Level One, Part time construction monitoring.			R	= R (60)
n/a		hours	R	= R (61)
Sub-total Additional Services (60+61)				= R (62)
Supplementary Services				
n/a		hours	R	= R (63)
Total Additional and Supplementary Services (62+63)				= R (64)
Appointment of sub-consultants / specialists				
n/a	Provisional Sum	-	-	= R (65)
n/a	Provisional Sum	-	-	= R (66)
n/a	Provisional Sum	-	-	= R (67)
Sub-total Sub-consultants / Specialists (65+66+67)				= R (68)
Administration of Sub-consultants/ Specialists				= R (69)
Total Sub-consultants / Specialists (68+69)				R (70)
Total Travelling Disbursements (Table A below)				R (71)

n/a	R	(72)
TOTAL FINANCIAL OFFER FOR VALUE BASED FEES FOR MECHANICAL ENGINEERS (VAT EXCLUDED) Sub-total Discounted fees + Additional Services + Supplementary services + Sub-consultants/Specialists + Travelling Disbursements + Contract Skills Development Goal (59+64+70+71+72)	R	(73)

- NOTE:**
1. The total Financial Offer for Value Based Fees for Architects (VAT excluded), (73) above, as well as the percentage of normal fees tendered, (j) above, **must be carried over to C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider, the total of which must then be carried over to C1.1 Form of Offer and Acceptance. Failure to carry this amount over to the Form of Offer and Acceptance will render the Bid Non-responsive as the Form of Offer must be fully completed.**
 2. Remuneration for value based appointments will be calculated as determined in C2.1.2 (i.e. the percentage of the normal fee tendered multiplied by the value fee scale *vis-à-vis* the actual cost of construction). The percentage of the normal fee shall apply to each stage for services provided in stages.
 3. **Supplementary Services:** Where applicable, the Service Provider will be remunerated at an hourly rate as tendered (Based on detailed time sheets) for administration in terms of time spent in liaising, coordinating, sourcing and verification of documents submitted including related meetings pertaining to and submitting reports as required to the following Targeted Procurement and Contract Participation Goals applicable to the Construction Project which shall include but not be limited to: SMME contract participation, EPWP and NYS labour reporting, the use of Local Material and Content, the cidb B.U.I.L.D. Programme and any other Contract Participation Goals applicable to the construction project. The hourly rate will be adjusted in accordance with Clause 3.16.1 of the cidb Standard Professional Service Contract and Clause 3.16.2 of the Contract Data.
 4. Time spent on travelling, as well as any other travel related expenses such as travelling costs, subsistence allowance and accommodation is deemed to be included in the Traveling Disbursements per return trip to site per (71).
 5. In the event of a variation in the Service Contract Period which results in additional travelling over and above the allowed number of trips in Table A, the additional Traveling will be paid in accordance with the "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Department's Website: <http://www.publicworks.gov.za/Consultants.asp> or from the Departmental Project Manager. These expenses are reimbursable at rates applicable on the time of the actual execution of the specific service contract. The first 2 hours of travelling is deductible as per Clause C2.1.4.4.2.
 6. Bidder to provide detailed breakdown of Travelling Disbursements per return trip to site from place of business:

Table A: Summary of Disbursements Tendered

Item	Description	Rate	X	Factor	X	No. of trips	Total (If not applicable Insert "NA")
1.	Traveling cost by car	Per Km R	X	Kms per Trip	X		R
2.	Subsistence	Per Trip R	X	-	X		R
3.	* Travelling Time as per Clause C2.1.4.4.2	Per Hour R	X	Hours per Trip	X		
4.	Other: Specify below (Table B).	R -	X		X	-	R
5.	Total disbursement carried over to Activity Schedule (71)						R

Table B: Other Disbursements (Attach separate sheet if necessary)

Table B only to be completed should the service provider's office be located in a different province and/or the service provider has to travel by air and/or stay over due to the vast distance between the service provider's office and the construction site, in order to attend site visits and meetings (Attach separate sheet if necessary). Any claim by the service provider in absence of rates will not be entertained except if approved by the Employer's representative prior to incurring the cost.

Item	Description	Rate	X	Qty	Total (if not applicable Insert "NA")
1.	Travelling by Air	R	X		R
2.	Car Rental	R	X		R
3.	Accommodation	R	X		R
4.		R	X		R
5.		R	X		R
6.		R	X		R
7.		R	X		R
8.	Total carried over to Table A, Item 4				R

7. Contract Skills Development Goal Cost

The provisional amount allowed for the in the Activity Schedule shall be adjusted upon award and confirmation of the Training Method/s selected by the service provider when beneficiaries have been identified. The Contract Skills Development Goal (CSDG) will be as described in Clause C3.3.13, which is the number of hours of skills development opportunities that a Service Provider must provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The CSDG is expressed in hours, and shall be not less than the professional fees in millions of Rand multiplied by 150 Hours.

8. The Skills Development Participation Costs to be calculated as follows:

8.1 Skills Development

8.1.1 Number of Hours:

Fees (1) excl. VAT = R5.6m

Number of hours skills development required = $R5.6 \times 150 = 840$ hours (hours to be rounded off)

8.2 Calculating the Notional Cost per hour

8.2.1 Notional Cost per quarter as per Table 3 of Clause C3.3.13 (Scope of Services) and optional methods

8.2.2 Number of Hours per quarter = 3 months x 20 days x 8 hours per day = 480 Hours

8.2.3 Notional Cost per Hour = 8.2.1 / 8.2.2

8.3 Calculating the Notional Cost Example:

Fees (1) from Activity Schedule excl. VAT= R5.6 Million

Number of hours skills development required = $R5.6 \times 150 = 840$ hours

Total number of hours per quarter = 40 hours per week x 4 weeks x 3 months = 480 hours

Notional cost per hour "Method 4" = $R71\ 500$ per quarter / 480 hours = R148.95 per hour

Total Notional cost = R148.95 (Rate per hour) x 840 (total number of hours) = R125 118.00

C2.2.S Activities for structural engineers

C2.2.S.1 The services as defined in C3 Scope of Services are required. The activity schedule below lists the normal services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees(annexure A), clause 3 and as further defined in C3 Scope of Services, as well as additional services as defined in C3 Scope of Services, of this document. (The clause references refer to the corresponding clauses in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.)

The applicable fee scale will only be amended to the latest fee scale in use by NDPWI should the project be suspended or where there is no activity for more than two (2) years, and the Employer elects to retain the services of the Service Provider upon uplifting the Suspension in terms of Clause 8.5.1 of the Contract Data.

C2.2.S.2 The estimated normal fees have been calculated using the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), by applying the applicable fee scale given in clause 4.2.1 (1)-(2) for an engineering project or clause 4.2.3 (1) for a multi-disciplinary project, to determine the basic fee and by multiplying the basic fee by the applicable multiplication factor given in clause 4.2.1 (4) or clause 4.2.3 (2) respectively. The cost of the works and the values used to determine the multiplication factors are defined in C3.04 'Project Cost Estimate'.

No allowance has been made in the estimated normal fees below for the additional services in C2.1.3.En.5 'Additional services' that have been specified to be included in the normal fees. The tenderer shall make provision for the cost of the additional services that are to be included under normal services by adjusting the percentage tendered in column (i) of C2.2.S.4 'Activity schedule for value based fees for structural engineers'.

C2.2.S.2 The services are to be provided in stages and the proportioning of the fee for normal services over the various stages shall be as set out in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees (annexure A), clause 4.2.8.

C2.2.S.3 The tenderer must make provision for all activities necessary for the execution of the service as set out in C3 Scope of Services.

C2.2.S.4 Activity schedule for value based fees for structural engineers

ACTIVITY SCHEDULE FOR VALUE BASED FEES FOR STRUCTURAL ENGINEERS

Tenderer's Tender for Value Based Fees for Structural Engineers

Fee for Normal Services inclusive of certain additional services as specified in C2.1.3.En.5

Latest net estimate of the construction cost for the Structural Works	(k) Estimated normal fees calculated according to C2.1.3.En.1 and C2.2.S.2 above	X	(l) Percentage of normal fees tendered by Tenderer	(k)x(l) Financial Offer by Tenderer for Value Based Fees
R1 707 750.00	R284 767.31	X	%	= R (74)

Additional Services – C2.1.3.En.5

Description	Quantity	Unit	Rate	Value
Level One, Part time construction monitoring			R	= R (75)
Any other additional services that may be required by Employer.		hours	R	= R (76)
Sub-total Additional Services (2+3)				= R (77)
Supplementary Services				
n/a		hours	R	= R (78)
Total Additional and Supplementary Services (77+78)				= R (79)

Appointment of sub-consultants / specialists

As direct sub-consultant, to be appointed by the Service Provider, for: geotechnical investigation, complete with test results and foundation recommendations, of the site identified in C3.2.2.2	Provisional Sum	-	-	= R (80)
n/a	Provisional Sum	-	-	= R (81)
n/a	Provisional Sum	-	-	= R (82)
Sub-total Sub-consultants / Specialists (80+81+82)				= R (83)

Administration of Sub-consultants/ Specialists	= R	(84)
Total Sub-consultants / Specialists (83+84)	R	(85)
Total Travelling Disbursements (Table A below)	R	(86)
n/a	R	(87)
TOTAL FINANCIAL OFFER FOR VALUE BASED FEES FOR STRUCTURAL ENGINEERS (VAT EXCLUDED) Sub-total Discounted fees + Additional Services + Supplementary services + Sub-consultants/Specialists + Travelling Disbursements + Contract Skills Development Goal (74+79+85+86+87)	R	(88)

- NOTE:**
1. The total Financial Offer for Value Based Fees for Architects (VAT excluded), (88) above, as well as the percentage of normal fees tendered, (l) above, must be carried over to C2.2.1 Summary Activity Schedule for Value Based Fees for all Professional Services comprising the Service Provider, the total of which must then be carried over to C1.1 Form of Offer and Acceptance. Failure to carry this amount over to the Form of Offer and Acceptance will render the Bid Non-responsive as the Form of Offer must be fully completed.
 2. Remuneration for value based appointments will be calculated as determined in C2.1.2 (i.e. the percentage of the normal fee tendered multiplied by the value fee scale *vis-à-vis* the actual cost of construction). The percentage of the normal fee shall apply to each stage for services provided in stages.
 3. **Supplementary Services:** Where applicable, the Service Provider will be remunerated at an hourly rate as tendered (Based on detailed time sheets) for administration in terms of time spent in liaising, coordinating, sourcing and verification of documents submitted including related meetings pertaining to and submitting reports as required to the following Targeted Procurement and Contract Participation Goals applicable to the Construction Project which shall include but not be limited to: SMME contract participation, EPWP and NYS labour reporting, the use of Local Material and Content, the cidb B.U.I.L.D. Programme and any other Contract Participation Goals applicable to the construction project. The hourly rate will be adjusted in accordance with Clause 3.16.1 of the cidb Standard Professional Service Contract and Clause 3.16.2 of the Contract Data.
 4. Time spent on travelling, as well as any other travel related expenses such as travelling costs, subsistence allowance and accommodation is deemed to be included in the Traveling Disbursements per return trip to site per (86) above.
 5. In the event of a variation in the Service Contract Period which results in additional travelling over and above the allowed number of trips in Table A, the additional Traveling will be paid in accordance with the "Rates for Reimbursable Expenses" as amended from time to time and referred to below, is obtainable on the Department's Website: <http://www.publicworks.gov.za/Consultants.asp> or from the Departmental Project Manager. These expenses are reimbursable at rates applicable on the time of the actual execution of the specific service contract. The first 2 hours of travelling is deductible as per Clause C2.1.4.4.2.
 6. Bidder to provide detailed breakdown of Travelling Disbursements per return trip to site from place of business:

Table A: Summary of Disbursements Tendered

Item	Description	Rate	X	Factor	X	No. of trips	Total (If not applicable Insert "NA")
1.	Travelling cost by car	Per Km R	X	Kms per Trip	X		R
2.	Subsistence	Per Trip R	X	-	X		R
3.	Travelling Time as per Clause C2.1.4.4.2	Per Hour R	X	Hours per Trip	X		
4.	Other: Specify below (Table B).	R -	X		X		R
5.	Total disbursement carried over to Activity Schedule (86)						R

Table B: Other Disbursements (Attach separate sheet if necessary)

Table B only to be completed should the service provider's office be located in a different province and/or the service provider has to travel by air and/or stay over due to the vast distance between the service provider's office and the construction site, in order to attend site visits and meetings (Attach separate sheet if necessary). Any claim by the service provider in absence of rates will not be entertained except if approved by the Employer's representative prior to incurring the cost.

Item	Description	Rate	X	Qty	Total (If not applicable Insert "NA")	
1.	Travelling by Air	R	X		R	
2.	Car Rental	R	X		R	
3.	Accommodation	R	X		R	
4.		R	X		R	
5.		R	X		R	
6.		R	X		R	
7.		R	X		R	
8.	Total carried over to Table A, Item 4					R

7. Contract Skills Development Goal Cost

The provisional amount allowed for the in the Activity Schedule shall be adjusted upon award and confirmation of the Training Method/s selected by the service provider when beneficiaries have been identified. The Contract Skills Development Goal (CSDG) will be as described in Clause C3.3.13, which is the number of hours of skills development opportunities that a Service Provider must provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The CSDG is expressed in hours, and shall be not less than the professional fees in millions of Rand multiplied by 150 Hours.

8. The Skills Development Participation Costs to be calculated as follows:

8.1 Skills Development

8.1.1 Number of Hours:

Fees (1) excl. VAT = R5.6m

Number of hours skills development required = $R5.6 \times 150 = 840$ hours (hours to be rounded off)

8.2 Calculating the Notional Cost per hour

8.2.1 Notional Cost per quarter as per Table 3 of Clause C3.3.13 (Scope of Services) and optional methods

8.2.2 Number of Hours per quarter = 3 months x 20 days x 8 hours per day = 480 Hours

8.2.3 Notional Cost per Hour = 8.2.1 / 8.2.2

8.3 Calculating the Notional Cost Example:

Fees (1) from Activity Schedule excl. VAT = R5.6 Million

Number of hours skills development required = $R5.6 \times 150 = 840$ hours

Total number of hours per quarter = 40 hours per week x 4 weeks x 3 months = 480 hours

Notional cost per hour "Method 4" = $R71\,500$ per quarter / 480 hours = R148.95 per hour

Total Notional cost = $R148.95$ (Rate per hour) x 840 (total number of hours) = R125 118.00

C3: SCOPE OF SERVICES

C3.0 Overall description of the Services

C3.0.1 Project description
Department of Justice: Ongoye Magistrate Court: Upgrading of Electricity, security measures, Repairs and Renovations.

C3.0.2 Scope
Upgrading of Electricity, security measures, repairs and renovations.

C3.0.3 Location of the Project
H11 Ilanda Street Esikhawini 3887

C3.0.4 Project Cost Estimate
R9 070 910.00

C3.0.5 Project Programme

The programme for the execution of the project is dependent on the various approval processes within the Department and a programme with specific time frames can therefore not be provided at tender stage since it will depend on the time frames required by the consultants for completion of the design and documentation based on the final scope of work, as well as approval processes within the Department and other legislative bodies from whom approvals may be required. The final programme will be in accordance with the approved programme in terms of clause 3.15 of the Standard Professional Services Contract and clause 3.15.1 of the Contract Data. The following table depicts provisional project milestone dates envisaged for tendering purposes only:

Project Milestones		Anticipated Date
1	Appointment of Design Consultants	
2	Concept Design Approval date	
3	Sketch Plan Submission date	
4	Sketch Plan Approval date	
5	Planning Completion date	
6	Confirmation of funds by Client	
7	Advertise Bids for construction	
8	Closing of Bids for construction	
9	Adjudication of Bids and Bid award for construction	
10	Site handover	
11	Anticipated Practical Completion month construction period +months for anticipated Extension of Time)	
12	Anticipated Works Completion	
13	Anticipated Final Completion (After month defect liability period)	

C3.0.6 Information available from Employer

C3.0.7 Other Contracts on Site

C3.0.8 Reporting Requirements and Approval Procedure

C3.1 Principal agent

C3.1.1 In the event of a construction project manager not being separately appointed, this professional services in consortium will act as the principal agent on this project.

No additional remuneration or any remuneration provided for in the different professions' fee scales will be paid to the Service Provider for providing the services as principal agent. Tenderers must make provision for and include all such costs in their tender when calculating the percentage as described in C2.1.1.2 above.

C3.1.2 Regarding an appointment as principal agent, duties over and above those of the different professions comprising the Service Provider will include *inter alia*:

- receiving of instructions from the departmental project manager and distributing to the relevant parties
- co-ordinating of consultants
- compiling and updating the planning programme
- co-ordinating and arranging site meetings and inspections
- liaising with client department only if specifically so instructed
- close liaising and co-operating with the departmental project manager
- furnishing of monthly project reports
- issuing of written instructions
- receiving notices according to the building contract
- issuing of monthly interim payment certificates, final payment certificates for practical and final completion
- making recommendations in respect of the extension of the building contract period and periods where penalties are applicable
- ensuring that all final accounts will be corrected and handed in on time
- administrating of and supervising the building contract in accordance with the requirements, where applicable, as set out in Manual for Private Architects PW 147, and
- other duties not listed above but which could reasonably be expected of a principal agent as well as those listed in the Tariff of Professional Fees for Architects.

C3.2 Labour-Intensive works

(a) The Service Provider shall not perform any significant portion of a project involving labour-intensive works under the direction of a staff member who has not completed the NQF level 7 unit standard "Develop and Promote Labour-Intensive Construction Strategies" or equivalent QCTO qualifications (See Appendix C of the Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)).

(b) The staff member of the Service Provider who is responsible for the administration of any works contract involving labour-intensive works must have completed the NQF level 5 unit standard "Manage Labour-Intensive Construction Projects" or equivalent QCTO qualifications (See Appendix C of the Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)).

The Service Provider must provide the Employer with satisfactory evidence (e.g. letter of competency) that staff members satisfy the requirements of (a) and (b) above.

(c) The Service Provider must design and implement the construction/maintenance works in accordance with the latest version (download at www.epwp.gov.za) of the Guidelines for the Implementation of the Labour-Intensive Projects under the Expanded Public Works Programme (EPWP) published by the Department of Public Works. The Service Provider must sign the undertaking (Appendix E of the Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)) confirming they have complied with EPWP requirements at design and implementation stages.

(d) The Service Provider shall, for monitoring purposes, keep monthly records and transmit to the Employer data on the following indicators with regard to the Project:

- Project budget and planned output according to EPWP requirements
- Actual Project Expenditure and actual output according to EPWP requirements
- Planned and achieved labour intensity
- Number of work opportunities created
- Demographics of workers employed (disaggregated by women, youth and persons with disabilities)
- Wage rate earned on project
- Number of person-days of employment created
- Copies of Identity documents of workers
- Number of persons who have attended training including the nature and duration of training provided
- Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M & E Framework
- Services provided or delivered in accordance with indicators in the EPWP M & E Framework

(e) The values for the indicators shall be submitted to the Employer according to agreed time frames on the prescribed reporting template (from the EPWP Unit in the Department of Public Works) and obtainable from www.epwp.gov.za.

(f) The Service Provider shall, before certifying a contractor's payment certificate, ensure that the contractor has submitted labour information in a format and timeframe specified by the Employer. If the information submitted by the contractor is inadequate the Service Provider shall not submit the payment certificate to the Employer for payment of the relevant outputs.

(g) The Service Provider shall certify that the works have been completed in accordance with the requirements of the Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP) and the Contract:

- whenever a payment certificate is presented to the Employer for payment; and
- immediately after the issuing of a practical completion certificate that signifies that the whole of the works have reached a state of readiness for occupation or use for the purposes intended although some minor work may be outstanding.

C3.A Scope of Services for architects

C3.A.1 Employer's objectives regarding architectural work

This tender is *inter alia* for:

A Service Provider performing architectural work on a **building project**.

C3.A.2 Description of the Services

C3.A.2.1 Services

The following architectural services are required:

As further defined hereafter in C3.A.3 Extent of Services as well as in the 2015 NDPWI - Scope of Architectural Services and Tariff of Fees (annexure B). Should there be any discrepancies between this Tender Document and other departmental documentation, the former shall take precedence.

C3.A.3 Extent of the Services

The specific architectural services required on this Project and referred to in C3.A.2 above, entails the following for:-

C3.A.3.1 Full services

Unless otherwise stated, duties will cover the full field of architectural functions.

C3.A.3.2 Additional services carrying additional fees

C3.Q Scope of Services for quantity surveyors

C3.Q.1 Employer's objectives regarding quantity surveying work

This tender is *inter alia* for:

A Service Provider performing quantity surveying work on a **building project**.

C3.Q.2 Description of the Services

C3.Q.2.1 Services

The following quantity surveying Services are required:

As further defined hereafter in C3.3 Extent of Services as well as in the **Guideline Tariff of Professional Fees In Respect of Services Rendered by a Quantity Surveyor in Private Practice** as referred to in C2.1.3.1 (the 2015 Guideline Tariff of Professional Fees) and also as further defined in the most recent publication of the Manual for Consultant Quantity Surveyors (QS 001). Should there be any discrepancies between this Tender Document and the Manual for Consultant Quantity Surveyors, the former shall take precedence

C3.Q.3 Extent of the Services

The specific quantity surveying Services required on this Project and referred to in C3.Q.2 above, entails the following for:-

C3.Q.3.1 Full services

Unless otherwise stated, duties will cover the full field of quantity surveying functions which are to be performed in accordance with the principles as set out in the most recent publication of the Manual for Consultant Quantity Surveyors(QS 001) and which can briefly be summarised as follows:

- establishment of an effective liaison with the architect;
- preparation of estimates in accordance with the Manual for Consultant Quantity Surveyors (QS 001);
- application of space and cost guidelines, if applicable. If not applicable the necessary adjustment in fees should be reflected in claims for remuneration;
- preparation of bills of quantities for all work in accordance with the Manual for Consultant Quantity Surveyors(QS 001)("all work" shall include *inter alia* electrical, mechanical and any other engineering work);
- administration of the contract in accordance with the Manual for Consultant Quantity Surveyors(QS 001);
- submission of monthly status and cost reports covering all aspects of the works in the prescribed formats "Contract Status Report" (PRM036/1) and "Financial Report" (PRM036/2);
- preparation of the final account in accordance with the Manual for Consultant Quantity Surveyors(QS 001);

Full services shall also include the following:

- the quantity surveyor shall evaluate tenders in consultation with the professional team and compile and submit such a tender report in the prescribed format to the departmental project manager. During this process he/she will maintain confidentiality of information and not negotiate with any tenderer without written instruction from the departmental project manager;

- determine interim progress payments in consultation with the respective agents;
- include in the final account those portions of the building contract comprising subcontracts, selected subcontracts and nominated subcontracts as drawn up by the respective agents;
- compiling an updated original written certification of the amount(s) on which other consultants' fees are based for every account they are allowed to submit. (It is, however, the duty of the other consultants concerned to calculate fees on the appropriate value and according to the correct fee scale, read in conjunction with their letter(s) of invitation.)

C3.Q.3.2 Estimates only

Preparation of estimates in accordance with the Manual for Consultant Quantity Surveyors (QS 001).

C3.Q.3.3 Principal agent

Should this appointment be to also act as principal agent over and above those as quantity surveyor, the duties will *inter alia* include:

- receiving of instructions from the departmental project manager and distributing to the relevant parties;
- co-ordinating of consultants;
- compiling and updating the planning programme;
- co-ordinating and arranging site meetings and inspections;
- liaising with client department only if specifically so instructed;
- close liaising and co-operating with the departmental project manager;
- furnishing of monthly project reports;
- issue written instructions;
- receive notices according to the building contract;
- Issuing of monthly interim payment certificates, final payment certificates for practical and final completion;
- making recommendations in respect of the extension of the building contract period and periods where penalties are applicable;
- ensuring that all final accounts will be corrected and handed in on time;
- administering of and supervising the building contract in accordance with the requirements, where applicable, as set out in Manual for Private Architects PW 147, Section E; and
- other duties not listed above but which could reasonably be expected of a principal agent as well as those listed in the 2009 Tariff of Professional Fees.

C3.Q.3.4 Additional Services carrying additional fees

C3.C Scope of Services for civil engineers

C3.C.1 Employer's objectives regarding civil engineering work

This tender is *inter alia* for:

A Service Provider performing civil engineering work on a multi-disciplinary project.

C3.C.2 Description of the Services

C3.C.2.1 Services

The general descriptions of the services required are as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees, (annexure A).

Specific services required are set out in C3.C.3 Extent of Services as well as in the most recent publication of the Departmental: Manual for Civil Consulting Engineers. Should there be any discrepancies between this Tender Document and the Manual for Civil Consulting Engineers, the former shall take precedence.

Where a quantity surveyor is included in the project team on a multi-disciplinary project, the quantity surveyor will compile bills of quantities for all work ("all work" shall include *inter alia* electrical, mechanical and any other engineering work).

C3.C.3 Extent of the Services

The following services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees, clause 3, are required: (The clause references refer to the corresponding clauses in the Tariff of Fees.)

C3.C.3.1 Normal Services (clause 3.2) including:

Clause 3.2.2 Stage 2 - Preliminary Design: Concept and Viability, Including Stage 1 - Inception
Clause 3.2.3 Stage 3 - Detail Design
Clause 3.2.4 Stage 4 - Documentation and Procurement
Clause 3.2.5 Stage 5 - Contract Administration and Inspection
Clause 3.2.6 Stage 6 - Close-Out
Completion of all consulting engineering services.

C3.C.3.2 Additional Services (clause 3.3) including:

C3.C.3.2.1 Clause 3.3.1 Additional Services pertaining to all Stages of the Project

C3.C.3.2.2 Clause 3.3.2 Construction Monitoring

(i) General

The consultant must make available construction monitoring staff for Level One, (part time), Two Four, (full time), monitoring.

The competence and experience of the tenderer's proposed site personnel shall be an integral part of the Employer's tender evaluation process. On acceptance of their tender by the Employer, the Service Provider shall not be permitted to offer alternative core personnel unless such alternative offer is as a result of a bona fide unforeseen circumstance. In such an event, the Employer shall only accept alternative personnel possessing at least similar qualifications and experience to those persons proposed in the tender.

The Employer shall be entitled to instruct the Service Provider to remove from the Works any person employed by the Service Provider on or about the execution of the Works who, in the opinion of the Employer, misconducts himself or is incompetent or negligent in the proper

performance of his duties, or whose presence on site is otherwise considered by the Employer, on reasonable grounds, to be undesirable.

(ii) Accommodation

Appropriate housing for the site staff shall be provided by the Service Provider. Site staff shall be housed as near to the location of the Works as may be practically possible. No separate payment will be made for the accommodation of site staff and rates tendered for the relevant site staff shall include full compensation for all accommodation costs.

(iii) Establishment of site office

Provision and maintenance of a site office building, all related services and supply of office furniture will be made under the Works Contract. The Service Provider shall however provide all office equipment and incidentals required for carrying out administration, supervision and inspection of the Works and shall include:

- a) Cell phones, including rental and call charges.
- b) All safety equipment for supervisory staff in accordance with the OHS requirements (e.g. safety jackets, boots, etc).
- c) All equipment including copier rental, fax machine, consumables, stationary, digital camera, etc.
- d) All necessary computer hardware, software, printers and modems and associated consumables.
- e) Any other items necessary for the capture of all relevant data required for administering the contract and reporting to the Employer.

One landline, including rental and call costs for work related office and fax usage shall be provided through the Works Contract.

(iv) Transport for site staff

The Service Provider shall provide sufficient appropriate vehicles on site for site staff.

C3.C.3.2.3 Clause 3.3.3 Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

The Employer shall appoint a Service Provider under a separate contract as its "agent" as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

The Service Provider under this contract shall however make provision for the incorporation of the Occupational Health and Safety specifications, compiled by others, in the tender documentation, if applicable.

It is a firm requirement that in the designs, planning and supervision of the execution of the work done under the contract resulting from this tender, all applicable regulations and stipulations under OHS Act, (Act 85 of 1993) including regulations and codes of practice etc. are complied with and that the final product shall be in full compliance with said legislation, standards, etc.

Furthermore, the Service Provider shall be fully responsible for the compliance of his operation, equipment as well as staff and persons under his supervision on site whether by invitation instruction or otherwise and regardless of the capacity, purpose and relationship of any such persons to the appointment, to all aspects of all applicable regulations and stipulations under OHS Act, (Act 85 of 1993).

C3.C.3.2.4 Clause 3.3.4 Quality Assurance System

C3.C.3.2.5 Clause 3.3.5 Lead Consulting Engineer

C3.C.3.2.6 Clause 3.3.6 Principal Agent of the Client
The principal agent is named in C3.3.2.1.

C3.C.3.3 Additional Services (Other)

C3.C.3.3.1 Environmental Impact Assessment

The Service Provider is required to lodge an application on behalf of the Employer in compliance with the Environmental Impact Assessment Regulations: Regulations 1182 and 1183 of the Environmental Conservation Act, 1989 (Act 73 of 1989) for the proposed construction of the project. The Service Provider is furthermore required to compile a specification setting out the minimum requirements regarding the Environmental Management Plan (EMP) for the construction process, evaluate and approve the contractor's EMP and monitor his adherence thereto.

C3.C.3.3.2 The Employer may order duties that fall outside the scope of the project as tendered. Any such additional services that may be required will be remunerated as set out in C2 Pricing Data.

C3.E Scope of Services for electrical engineers

C3.E.1 Employer's objectives regarding electrical engineering work

This tender is *inter alia* for:

A Service Provider performing electrical engineering work on a **multi-disciplinary project**.

C3.E.2 Description of the Services

C3.E.2.1 Services

The general descriptions of the services required are as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.

Specific services required are set out in **C3.E.3 Extent of Services** as well as in the most recent publication of the Departmental: Manual for Electrical/Electronic and Mechanical Consulting Engineers. Should there be any discrepancies between this tender document and the Manual for Electrical/Electronic and Mechanical Consulting Engineers, the former shall take precedence.

Where a quantity surveyor is included in the project team on a multi-disciplinary project, the quantity surveyor will compile bills of quantities for all work ("all work" shall include *inter alia* electrical, mechanical and any other engineering work).

C3.E.3 Extent of the Services

The following services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees, clause 3, are required: (The clause references refer to the corresponding clauses in the Tariff of Fees.)

C3.E.3.1 Normal Services (clause 3.2) Including:

Clause 3.2.2 Stage 2 - Preliminary Design: Concept and Viability, including Stage 1 - Inception
Clause 3.2.3 Stage 3 - Detail Design
Clause 3.2.4 Stage 4 - Documentation and Procurement
Clause 3.2.5 Stage 5 - Contract Administration and Inspection
Clause 3.2.6 Stage 6 - Close-Out
Completion of all consulting engineering services

C3.E.3.2 Additional Services (clause 3.3) Including:

C3.E.3.2.1 Clause 3.3.1 Additional Services pertaining to all Stages of the Project

C3.E.3.2.2 Clause 3.3.2 Construction Monitoring

(i) **General**

The consultant must make available construction monitoring staff for Level One, (part time), Level Two, (full time), monitoring.

The competence and experience of the tenderer's proposed site personnel shall be an integral part of the Employer's tender evaluation process. On acceptance of their tender by the Employer, the Service Provider shall not be permitted to offer alternative core personnel unless such alternatively offer is as a result of a bona fide unforeseen circumstance. In such an event, the Employer shall only accept alternative personnel possessing at least similar qualifications and experience to those persons proposed in the tender.

The Employer shall be entitled to instruct the Service Provider to remove from the Works any person employed by the Service Provider on or about the execution of the Works who, in the opinion of the Employer, misconducts himself or is incompetent or negligent in the proper performance of his duties, or whose presence on site is otherwise considered by the Employer, on reasonable grounds, to be undesirable.

(ii) Accommodation

Appropriate housing for the site staff shall be provided by the Service Provider. Site staff shall be housed as near to the location of the Works as may be practically possible. No separate payment will be made for the accommodation of site staff and rates tendered for the relevant site staff shall include full compensation for all accommodation costs.

(iii) Establishment of site office

Provision and maintenance of a site office building, all related services and supply of office furniture will be made under the Works Contract. The Service Provider shall however provide all office equipment and incidentals required for carrying out administration, supervision and inspection of the Works and shall include:

- a) Cell phones, including rental and call charges.
- b) All safety equipment for supervisory staff in accordance with the OHS requirements (e.g. safety jackets, boots, etc.).
- c) All equipment including copier rental, fax machine, consumables, stationary, digital camera, etc.
- d) All necessary computer hardware, software, printers and modems and associated consumables.
- e) Any other items necessary for the capture of all relevant data required for administering the contract and reporting to the Employer.

One landline, including rental and call costs for work related office and fax usage shall be provided through the Works Contract.

(iv) Transport for site staff

The Service Provider shall provide sufficient appropriate vehicles on site for site staff.

C3.E.3.2.3 Clause 3.3.3 Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

The Employer shall appoint a Service Provider under a separate contract as its "agent" as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

The Service Provider under this contract shall however make provision for the incorporation of the Occupational Health and Safety specifications, compiled by others, in the tender documentation, if applicable.

It is a firm requirement that in the designs, planning and supervision of the execution of the work done under the contract resulting from this tender, all applicable regulations and stipulations under OHS Act, (Act 85 of 1993) including regulations and codes of practice, etc. are complied with and that the final product shall be in full compliance with said legislation, standards etc.

Furthermore, the Service Provider shall be fully responsible for the compliance of his operation, equipment as well as staff and persons under his supervision on site whether by invitation instruction or otherwise and regardless of the capacity, purpose and relationship of any such persons to the appointment, to all aspects of all applicable regulations and stipulations under OHS Act, (Act 85 of 1993).

C3.E.3.2.4 Clause 3.3.4 Quality Assurance System

C3.E.3.2.5 Clause 3.3.5 Lead Consulting Engineer

C3.E.3.2.6 Clause 3.3.6 Principal Agent of the Client
The principal agent is named in C3.3.2.1.

C3.E.3.3 Additional Services (Other)

C3.E.3.3.1 Environmental Impact Assessment

The Service Provider is required to lodge an application on behalf of the Employer in compliance with the Environmental Impact Assessment Regulations: Regulations 1182 and 1183 of the Environmental Conservation Act, 1989 (Act 73 of 1989) for the proposed construction of the project. The Service Provider is furthermore required to compile a specification setting out the minimum requirements regarding the Environmental Management Plan (EMP) for the construction process, evaluate and approve the contractor's EMP and monitor his adherence thereto.

C3.E.3.3.2 The Employer may order duties that fall outside the scope of the project as tendered. Any such additional services that may be required will be remunerated as set out in C2 Pricing Data.

C3.M Scope of Services for mechanical engineers

C3.M.1 Employer's objectives regarding mechanical engineering work

This tender is *inter alia* for:

A Service Provider performing mechanical engineering work on a multi-disciplinary project.

C3.M.2 Description of the Services

C3.M.2.1 Services

The general descriptions of the services required are as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.

Specific services required are set out in **C3.M.3 Extent of Services** as well as in the most recent publication of the Departmental: Manual for Electrical/Electronic and Mechanical Consulting Engineers. Should there be any discrepancies between this Tender Document and the Manual for Electrical/Electronic and Mechanical Consulting Engineers, the former shall take precedence.

Where a quantity surveyor is included in the project team on a multi-disciplinary project, the quantity surveyor will compile bills of quantities for all work ("all work" shall include *inter alia* electrical, mechanical and any other engineering work).

C3.M.3 Extent of the Services

The following services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees, clause 3, are required: (The clause references refer to the corresponding clauses in the Tariff of Fees.)

C3.M.3.1 Normal Services (clause 3.2) including:

Clause 3.2.2 Stage 2 - Preliminary Design: Concept and Viability, including Stage 1 - Inception

Clause 3.2.3 Stage 3 - Detail Design

Clause 3.2.4 Stage 4 - Documentation and Procurement

Clause 3.2.5 Stage 5 - Contract Administration and Inspection

Clause 3.2.6 Stage 6 - Close-Out

Completion of all consulting engineering services.

C3.M.3.2 Additional Services (clause 3.3) including:

C3.M.3.2.1 Clause 3.3.1 Additional Services pertaining to all Stages of the Project

C3.M.3.2.2 Clause 3.3.2 Construction Monitoring

(i) **General**

The consultant must make available construction monitoring staff for Level One, (part time), Level Two, (full time), monitoring.

The competence and experience of the tenderer's proposed site personnel shall be and integral part of the Employer's tender evaluation process. On acceptance of their tender by the Employer, the Service Provider shall not be permitted to offer alternative core personnel unless such alternatively offer is as a result of a bona fide unforeseen circumstance. In such an event, the Employer shall only accept alternative personnel possessing at least similar qualifications and experience to those persons proposed in the tender.

The Employer shall be entitled to instruct the Service Provider to remove from the Works any person employed by the Service Provider on or about the execution of the Works who, in the

opinion of the Employer, misconducts himself or is incompetent or negligent in the proper performance of his duties, or whose presence on site is otherwise considered by the Employer, on reasonable grounds, to be undesirable.

(ii) Accommodation

Appropriate housing for the site staff shall be provided by the Service Provider. Site staff shall be housed as near to the location of the Works as may be practically possible. No separate payment will be made for the accommodation of site staff and rates tendered for the relevant site staff shall include full compensation for all accommodation costs.

(iii) Establishment of site office

Provision and maintenance of a site office building, all related services and supply of office furniture will be made under the Works Contract. The Service Provider shall however provide all office equipment and incidentals required for carrying out administration, supervision and inspection of the Works and shall include:

- a) Cell phones, including rental and call charges.
- b) All safety equipment for supervisory staff in accordance with the OHS requirements (e.g. safety jackets, boots, etc.).
- c) All equipment including copier rental, fax machine, consumables, stationary, digital camera, etc.
- d) All necessary computer hardware, software, printers and modems and associated consumables.
- e) Any other items necessary for the capture of all relevant data required for administering the contract and reporting to the Employer.

One landline, including rental and call costs for work related office and fax usage shall be provided through the Works Contract.

(iv) Transport for site staff

The Service Provider shall provide sufficient appropriate vehicles on site for site staff.

C3.M.3.2.3 Clause 3.3.3 Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

The Employer shall appoint a Service Provider under a separate contract as its "agent" as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

The Service Provider under this contract shall however make provision for the incorporation of the Occupational Health and Safety specifications, compiled by others, in the tender documentation, if applicable.

It is a firm requirement that in the designs, planning and supervision of the execution of the work done under the contract resulting from this tender, all applicable regulations and stipulations under OHS Act, (Act 85 of 1993) including regulations and codes of practice, etc. are complied with and that the final product shall be in full compliance with said legislation, standards, etc.

Furthermore, the Service Provider shall be fully responsible for the compliance of his operation, equipment as well as staff and persons under his supervision on site whether by invitation instruction or otherwise and regardless of the capacity, purpose and relationship of any such persons to the appointment, to all aspects of all applicable regulations and stipulations under OHS Act, (Act 85 of 1993).

C3.M.3.2.4 Clause 3.3.4 Quality Assurance System

C3.M.3.2.5 Clause 3.3.5 Lead Consulting Engineer

C3.M.3.2.6 Clause 3.3.6 Principal Agent of the Client
The principal agent is named in C3.3.2.1.

C3.M.3.3 Additional Services (Other)

C3.M.3.3.1 Environmental Impact Assessment

The Service Provider is required to lodge an application on behalf of the Employer in compliance with the Environmental Impact Assessment Regulations: Regulations 1182 and 1183 of the Environmental Conservation Act, 1989 (Act 73 of 1989) for the proposed construction of the project. The Service Provider is furthermore required to compile a specification setting out the minimum requirements regarding the Environmental Management Plan (EMP) for the construction process, evaluate and approve the contractor's EMP and monitor his adherence thereto.

C3.M.3.3.2 The Employer may order duties that fall outside the scope of the project as tendered. Any such additional services that may be required will be remunerated as set out in C2 Pricing Data.

C3.S Scope of Services for structural engineers

C3.S.1 Employer's objectives regarding structural engineering work

This tender is *inter alia* for:

A Service Provider performing structural engineering work on a multi-disciplinary project.

C3.S.2 Description of the Services

C3.S.2.1 Services

The general descriptions of the services required are as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees.

Specific services required are set out in C3.S.3 Extent of Services as well as in the most recent publication of the Departmental: Manual for Structural Consulting Engineers. Should there be any discrepancies between this tender document and the Manual for Structural Consulting Engineers, the former shall take precedence.

Where a quantity surveyor is included in the project team on a multi-disciplinary project, the quantity surveyor will compile bills of quantities for all work ("all work" shall include *inter alia* electrical, mechanical and any other engineering work).

C3.S.3 Extent of the Services

The following services as defined in the 2016 NDPWI - Scope of Engineering Services and Tariff of Fees clause 3, are required: (The clause references refer to the corresponding clauses in the Tariff of Fees.)

C3.S.3.1 Normal Services (clause 3.2) including:

Clause 3.2.2 Stage 2 - Preliminary Design: Concept and Viability, including Stage 1 - Inception
Clause 3.2.3 Stage 3 – Detail Design
Clause 3.2.4 Stage 4 – Documentation and Procurement
Clause 3.2.5 Stage 5 – Contract Administration and Inspection
Clause 3.2.6 Stage 6 – Close-Out
Completion of all consulting engineering services.

C3.S.3.2 Additional Services (clause 3.3) including:

C3.S.3.2.1 Clause 3.3.1 Additional Services pertaining to all Stages of the Project

(a) Geotechnical Investigation

The composition of a geotechnical investigation (number of trial holes, depths, typical tests, etc.) is dependent on a number of variables such as area geology, structure types, etc. The Service Provider must ensure that he compile the investigation in such a way that enough information is acquired for him to be able to design the foundations adequately.

C3.S.3.2.2 Clause 3.3.2 Construction Monitoring

(i) General

The consultant must make available construction monitoring staff for Level One, (Part time), Level Two, (Full time), monitoring.

The competence and experience of the tenderer's proposed site personnel shall be an integral part of the Employer's tender evaluation process. On acceptance of their tender by the Employer, the Service Provider shall not be permitted to offer alternative core personnel unless such alternatively offer is as a result of a bona fide unforeseen circumstance. In such an event,

the Employer shall only accept alternative personnel possessing at least similar qualifications and experience to those persons proposed in the tender.

The Employer shall be entitled to instruct the Service Provider to remove from the Works any person employed by the Service Provider on or about the execution of the Works who, in the opinion of the Employer, misconducts himself or is incompetent or negligent in the proper performance of his duties, or whose presence on site is otherwise considered by the Employer, on reasonable grounds, to be undesirable.

(ii) Accommodation

Appropriate housing for the site staff shall be provided by the Service Provider. Site staff shall be housed as near to the location of the Works as may be practically possible. No separate payment will be made for the accommodation of site staff and rates tendered for the relevant site staff shall include full compensation for all accommodation costs.

(iii) Establishment of site office

Provision and maintenance of a site office building, all related services and supply of office furniture will be made under the Works Contract. The Service Provider shall however provide all office equipment and incidentals required for carrying out administration, supervision and inspection of the Works and shall include:

- f) Cell phones, including rental and call charges.
- g) All safety equipment for supervisory staff in accordance with the OHS requirements (e.g. safety jackets, boots etc.).
- h) All equipment including copier rental, fax machine, consumables, stationary, digital camera, etc.
- i) All necessary computer hardware, software, printers and modems and associated consumables.
- j) Any other items necessary for the capture of all relevant data required for administering the contract and reporting to the Employer.

One landline, including rental and call costs for work related office and fax usage shall be provided through the Works Contract.

(iv) Transport for site staff

The Service Provider shall provide sufficient appropriate vehicles on site for site staff.

C3.S.3.2.3 Clause 3.3.3 Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

The Employer shall appoint a Service Provider under a separate contract as its "agent" as contemplated in the Construction Regulations to the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

The Service Provider under this contract shall however make provision for the incorporation of the Occupational Health and Safety specifications, compiled by others, in the tender documentation, if applicable.

It is a firm requirement that in the designs, planning and supervision of the execution of the work done under the contract resulting from this tender, all applicable regulations and stipulations under OHS Act, (Act 85 of 1993) including regulations and codes of practice, etc. are complied with and that the final product shall be in full compliance with said legislation, standards, etc.

Furthermore, the Service Provider shall be fully responsible for the compliance of his operation, equipment as well as staff and persons under his supervision on site whether by invitation instruction or otherwise and regardless of the capacity, purpose and relationship of any such persons to the appointment, to all aspects of all applicable regulations and stipulations under OHS Act, (Act 85 of 1993).

C3.S.3.2.4 Clause 3.3.4 Quality Assurance System

C3.S.3.2.5 Clause 3.3.5 Lead Consulting Engineer

C3.S.3.2.6 Clause 3.3.6 Principal Agent of the Client
The principal agent is named in C3.3.2.1.

C3.S.3.3 Additional Services (Other)

C3.S.3.3.1 Environmental Impact Assessment

The Service Provider is required to lodge an application on behalf of the Employer in compliance with the Environmental Impact Assessment Regulations: Regulations 1182 and 1183 of the Environmental Conservation Act, 1989 (Act 73 of 1989) for the proposed construction of the project. The Service Provider is furthermore required to compile a specification setting out the minimum requirements regarding the Environmental Management Plan (EMP) for the construction process, evaluate and approve the contractor's EMP and monitor his adherence thereto.

C3.S.3.3.2 The Employer may order duties that fall outside the scope of the project as tendered. Any such additional services that may be required will be remunerated as set out in C2 Pricing Data.

C3.3 General for all professions

C3.3.1 Use of reasonable skill and care

It will be expected of the Service Provider to apply reasonable skills and due diligence in the execution of the duties stipulated in this document which shall include *inter alia* the following:

Although the Service Provider's documents may be scrutinised by the Employer, this shall in no way relieve him of his professional responsibility for the proper and prompt execution of his duties. The Employer shall also be entitled to have any documentation or calculations verified by Others. In the event of malperformance, default or negligence, the Employer shall have the right to claim compensation or damages and set off such against any amount payable.

During assessment of any existing facilities, which may have a direct bearing on the Project, the Service Provider shall determine deficiencies with such facilities in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the SANS 10400, etc. and recommend measures to rectify those during the project execution phase.

The departmental project manager shall be notified by the Service Provider and his personnel of any transgression of *inter alia* the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and environmental legislation during the Service Provider's operation pertaining to the Contract regardless of who may be involved.

C3.3.2 Co-operation with other services providers

It will be required of the Service Provider to co-operate with the following:

C3.3.2.1 Service Providers

Service Providers from the following professions are/will be appointed on the Project to form the professional team:

and other service providers as may from time to time be deemed necessary.

The above-mentioned will act as principal agent.

The required professional services will be executed by the professional team under the control and management of the designated departmental project manager who, at the time of invitation

to perform professional services, will be the person mentioned in T1.1.6. The Employer reserves the right to replace the mentioned departmental project manager with another member of its staff or any individual/firm from the private sector should it be deemed necessary at any stage during the execution of the Project.

C3.3.2.2 Occupational Health and Safety Act, 1993 (Act 85 of 1993)

The Employer shall appoint a Service Provider under a separate contract as its "agent" as contemplated in the Construction Regulations in the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

The Service Provider under this Contract shall however make provision for the incorporation of the Occupational Health and Safety specifications, compiled by others, in the tender documentation, if applicable.

Furthermore, the Service Provider shall be fully responsible for the compliance of his operation, equipment as well as staff and persons under his supervision on site whether by invitation, instruction or otherwise and regardless of the capacity, purpose and relationship of any such persons to the appointment, to all aspects of all applicable regulations and stipulations under the act.

C3.3.2.3 Other role players

Local, provincial and national authorities, statutory bodies, governmental departments, Others, as may be required from time to time, including the client department/end user(s).

C3.3.3 Brief

C3.3.3.1 Target dates and times

The Service Provider will be expected throughout to give preference to the execution of the work involved in this commission.

The work of all Service Providers will be co-ordinated by the principal agent. All work is to be performed by the persons listed as Key Persons and persons under their supervision and further be executed as described in the Programme according to clause 3.15 of the Contract Data (and/or PEP according to the same clause, if applicable).

During the construction phase of the Project it will be expected of the principal agent to obtain a construction programme from the main contractor, to continuously monitor his progress against that programme for compliance and to take whichever steps have been described in the relevant manual and the Working Guideline for Project Managers. This should be done in collaboration with the rest of the professional team, should the progress not be according to the said programme.

The Principal Agent / Principal Engineer or if a Quantity Surveyor has been appointed, the Quantity Surveyor, shall prepare the final account in consultation with the Employer and issue the final account to the contractor within sixty (60) working days from the date of Practical Completion. Late completion of final account will result in penalties being applied per calendar day, as tabled under Clause 3.12 of the Contract Data.

C3.3.3.2 Reporting requirements

Notwithstanding any other requirements as listed elsewhere, the Service Provider shall submit a monthly report indicating progress of the Services.

C3.3.3.3 Local content

It is the policy of the Employer to give preference to materials and equipment of South African manufacture. The Service Provider is to ensure that, wherever feasible, designs are based on locally manufactured equipment and materials which can meet requirements at competitive prices.

C3.3.3.4 Design Innovation

Given the need for energy efficiency and environmental sustainability in the built environment, each member of the professional team is required, wherever possible and applicable, to

demonstrate design innovation in all aspects of the Service towards "green" design solutions. Aspects to be considered and incorporated in all new building and/or maintenance designs are, *inter alia* but not limited to:

- (a) sustainable development
e.g. In building form, material choice, construction detailing and methods, recycling ability;
- (b) energy efficiency
e.g.
 - (i) passive design methods towards energy conservation and consumption: building orientation, exploitation of nature's inherent energy sources);
 - (ii) energy efficient solutions and installations for lighting, ventilation, cooling, heating, etc. (e.g. energy efficient light fittings);
 - (iii) alternative or renewable energy sources where practical/feasible/economical;
- (c) water conservation/saving/re-use methods and
- (d) environmental friendliness (e.g. respect for natural habitat, blending of building with site/environment/surrounding fabric, positioning of buildings, consideration of neighbouring sites' access to sun, wind, view, etc).

C3.3.3.5 Final disposal of documents

Upon approval and finalisation of the final account of projects requiring a security clearance, it is a requirement that the Service Provider forward to the Employer all documents relating to this service. The same may also be requested on projects not requiring a security clearance.

C3.3.4 Reference data

C3.3.4.1 Space norms

Space norms (type here "are" or "are not" as the case may be) applicable on this service.

The space norms of the Department of Public Works & Infrastructure, space norms as may be published in the government gazette, norms determined by the Employer, when applicable to this/these Project(s), are the norms as set hereunder and shall not be exceeded without prior written approval. Any re-planning resulting from the norms as set, being exceeded, shall be for the Service Provider's account.

The professional team must apply cost control and submit elemental estimates at each stage, reduced to a common date. The Service Provider must set appropriate procedures in place with the other members of the professional team to ensure compliance in this regard.

Space must be controlled and reconciled with the approved norm(s). All planning units are to be provided and if not, this must be pointed out.

The Employer must, at least at completion of each work stage, be provided by the principal agent with certificates which specify that the space norms are not being exceeded, before the next stage may be proceeded with.

The space norm(s) (type here "is as follows" or "are as follows" if in the plural or type "not yet known" or type "is/are not applicable" if the project is not subject to space norms):

- (a) SPACE NORM(S):

ASM/GSM _____ m²

C3.3.5 Applicable legislation and standards

This section applies to legislation emanating from national and provincial governments as well as that of any local authorities in whose area of jurisdiction the subject of the appointment falls and which has a bearing on the activities and facilities under this appointment.

All the applicable legislation, which do not specifically allow discretion in respect of compliance by the State, shall be followed exactly as intended by such legislation regardless of any instructions,

verbal or in writing, to the contrary. (Refer *inter alia* to Section 41 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993)).

Should any applicable legislation allow discretion in respect of compliance by the State, it shall be followed exactly as intended by the relevant legislation as if no discretion is allowed until such time as specific instructions in writing are issued to the appointed professional team by the departmental project manager.

The Service Provider undertakes to ensure that his actions and outcome thereof including, but not limited to, the facilities to be affected by the Service shall be in accordance with all relevant legislation and upon delivery, will function as required by said relevant legislation. The Service Provider's actions and the outcome thereof will in no way be detrimental to the health and safety of the occupants or persons present therein or in the vicinity thereof. Similarly it must not be detrimental to any aspects of the environment in its structure or operation if operated as specified in operation manual(s). The relevant legislation meant herein, as amended, consist of *inter alia* the following, but not limited to:

- Architectural Profession Act, 2000 (Act 444 of 2000);
- Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965);
- Construction Industry Development Board Act, 2000 (Act 38 of 2000);
- Council for the Built Environment Act, 2000 (Act 43 of 2000);
- Electricity Act, 1987 (Act 41 of 1987);
- Engineering Profession Act, 2000 (Act 46 of 2000);
- Environmental Conservation Act, 1989 (Act 73 of 1989);
- Fire Brigade Services Act, 1987 (Act 99 of 1987);
- Local Government Municipal Systems Act, 2000 (Act 32 of 2000), municipal by-laws and any special requirements of the local service supply authority;
- National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977);
- National Environmental Management Act, 1998 (Act 107 of 1998);
- National Heritage Resources Act, 1999 (Act 25 of 1999);
- National Water Act, 1998 (Act 36 of 1998);
- Occupational Health and Safety Act, 1993 (Act 85 of 1993);
- Project and Construction Management Profession Act, 2000 (Act 48 of 2000);
- Quantity Surveying Profession Act, 2000 (Act 49 of 2000);
- Telecommunications Act, 1996 (Act 103 of 1996);
- Water Services Act, 1997 (Act 108 of 1997) and general authorizations;
- the latest issue of SANS 10142: "Code of Practice for the Wiring of Premises";
- the Regulations of the local Gas Board, where applicable and
- all regulations promulgated under the above Acts.

Although the more salient legislation has been referred to above, the *onus* remains on the Service Provider to adhere to, and apply, any and all Acts and/or Regulations not specifically mentioned in the list above but which will have an effect on the Project.

This will be a continuous process throughout the appointment, which will manifest itself during the following phases:

- development of plans and documentation;
- supervision of any Service Provider under the appointment;
- ensuring compliance of the end product;
- compiling and issuing of Instruction/Operational Manuals indicating *inter alia* what the legal and safety requirements entail for the user(s)/operator(s) of the facilities;
- providing instruction to the intended users/operators.

The Service Provider accepts full and complete responsibility (both contractually and/or in delict) regarding compliance with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) for his acts and omissions as well as those of his employees and indemnifies the Employer against any legal action in this regard.

The Service provider undertakes to ensure that the requirements of the Occupational Health and Safety Act, 1993 will similarly apply to the agreement with any sub service providers inclusive of indemnifying the Employer against any legal action regarding the actions and/or omissions by them.

C3.3.6 Access to land/buildings/sites

Access to the land/buildings/sites shall be negotiated in consultation with the departmental project manager.

C3.3.7 Software application for programming

The Service Provider must avail himself of software to be used in the Project documentation for compatibility with other Service Providers as well as the Employer. Specific requirements for compatibility are specified in the relevant manuals.

C3.3.8 Security clearance

It is an explicit condition of this agreement that partners, directors and/or the members of staff who will have insight into the planning of projects requiring security clearance, be kept to a minimum and that such persons will not object to being submitted to a security clearance, if the Employer so requires.

If the latter is applicable, the necessary forms will accompany this tender or be provided to the Service Provider at any stage thereafter. These forms must be completed, if attached, and returned with the tender. It is important to furnish information which is complete in every respect.

Should the authority responsible for the clearance, for security reasons not be satisfied with the classification obtained by any of the staff members of the Service Provider, it will be a further condition of this appointment that none of such staff members be involved with any aspect of the Project.

All documents pertaining to these projects must be stored in a safe place when not in use so as to ensure that the level of security of the projects is maintained.

The Employer will not accept liability for any costs in this regard.

FINGER PRINTS (except Defence projects)

Persons of whom security clearance is required can obtain a finger print form SAP 91(a) from any police station. Kindly ensure that the police official responsible for taking the finger prints certifies the form since non-certification will result in the form being unacceptable.

C3.3.9 Forms for contract administration

All forms required during contract administration, called PRM forms, are obtainable on the Employer's website at [http://www.publicworks.gov.za/under "Documents"; "Consultants Guidelines"](http://www.publicworks.gov.za/under%20Documents%20Consultants%20Guidelines); item 14. The agreement and conditions of contract to be entered into with the main contractor shall be the most recent version of the JBCC, if it is a multi-disciplinary contract, or GCC, if it is an engineering contract, as approved and in use by the National Department of Public Works & Infrastructure.

C3.3.10 Condition to accept unregistered persons with suitable built environment qualifications on secondment

It is an express term of the contract that the Service Provider, after award of tender, accept unregistered, suitably qualified (built environment) persons in his office for the purpose of exposing the latter to the full extent of professional work, or as may be required according to specific circumstances, in order to gain experience which can be presented to the relevant Council for consideration towards professional registration. The secondment of such unregistered persons will be negotiated with the Service Provider in terms of numbers, periods of training and extent of

professional work opportunity to be afforded. The conditions of secondment will be the subject of a separate Memorandum of Understanding with the Service Provider which will serve as an annexure hereto. Any secondment arrangements will cease upon the professional registration of the seconded person or as agreed on and so included in the aforesaid Memorandum of Understanding. The responsibility for salaries of seconded persons will remain with the Employer, but responsibility for operational expenses, necessary for the execution of the work, will vest with the Service Provider, all of which will be dealt with in the Memorandum of Understanding.

C3.3.11 Submission of Accrual Reports

The Service Provider shall submit accrual reports to the client representative at the end of March and September each year for the duration of the Service Contract period from the date of appointment up to and including project closeout. This is to ensure that PMTE complies with the accounting framework GRAP, which requires that PMTE disclose all its accruals as at the end of each reporting date.

C3.3.12 Submission of monthly Project Execution Plans (PEP)

The Principle Agent will submit monthly an updated Project Execution Plans (PEP) in accordance with DPWI standard proforma, on a date as agreed with the Employer's Representative.

C3.3.13 Contract Skills Development Goal

The Contract Skills Development Goal is "not applicable" to this project.

The cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice, No. 43495 of 3 July 2020 where the Service Contract has a duration of 12 months or more, and the professional fees excluding allowances and including VAT exceeds R5 million. This best practice Standard for developing skills through infrastructure contracts standard establishes a minimum contract skills development goal which is to be achieved in the performance of a contract in relation to the provision of different types of workplace opportunities linked to work associated with a contract which culminate in or lead to registration in a professional category by one of the professional bodies listed in the standard (Table 1).

Table 1: Categories of registration

Profession	Category of registration	Act
Architectural	Architect, Senior Architectural Technologist, Architectural Technologist or Architectural Draughts person	Architectural Profession Act of 2000 (Act No.44 of 2000)
Construction Project Management or Construction Management	Construction Project Manager or Construction Manager	Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000)
Engineering	Engineer, Engineering Technologist, Engineering Technician or Certificated Engineer	Engineering Profession Act of 2000 (Act No. 48 of 2000)
Health and Safety Practitioners	Construction Health and Safety Agent, Construction Health and Safety Manager, Construction Health and Safety Officer	Occupational Health and Safety Act of 1993 (Act No. 85 of 1993) Construction Regulations,
Landscape Architectural	Landscape Architect, Landscape Technologist, Landscape Technician or Landscape Assistant	Landscape Architectural Profession Act of 2000 (Act No. 45 of 2000)
Planning	Planner or Technical planner	Planning Profession Act, 2002. (Act No. 36 of 2002)

Quantity surveying	Quantity surveyor	Quantity Surveying Profession Act of 2000 (Act No. 49 of 2000)
Scientists	Natural scientists	Natural Scientific Professions Act (Act No. 27 of 2003)
Surveying	Land surveyor, Engineering surveyor or Technician engineering surveyor	Professional and Technical Surveyors' Act (Act No. 40 of 1984)
Valuers	Valuer or Associate Valuer	Property Valuers Profession Act (Act No. 47 of 2000)

The Contract Skills Development Goal (CSDG) is the number of hours of skills development opportunities that a Service Provider contracts to provide in relation to work directly related to the Service Contract up to completion the Professional Service Contract. The contract skills development goals, expressed in hours, shall be not less than the professional fees [(1) from the Activity Schedule + VAT] in millions of Rand multiplied by 150 where professional fees is the financial value of a professional service contract at the time of the award of the contract excluding all allowances and expenses, but including value added tax.

Example: The contract amount for a professional services contract is R5.6 m. The contract skills development goal in hours is $R5.6m \times 150 = 840$ hours, where the contract amount is the basic fee for services excluding allowances but including VAT.

Where required in terms of the service contract, a specified proportion of the learners and candidates shall be selected from persons in the employ of the state who meet the relevant eligibility criteria for the relevant programme.

Where required in terms of the service contract, the Employer shall advise the Service Provider of the types of training to be undertaken by the learners and candidates. The mentor shall be a registered person, designated to guide a learner or candidate through structured work experience learning component of a learning programme required for the acquisition of a part or full qualification or professional designation.

Achieving the Contract Skills Development Goal (CSDG)

The Service Provider shall achieve the measurable contract skills development goal by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the following in relation to work directly related to the contract or order:

Method 1: structured workplace learning opportunities for learners towards the attainment of a part or a full occupational qualification;

Method 2: structured workplace learning opportunities for apprentices or other artisan learners towards the attainment of a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012) subject to at least 60% of the artisan learners being holders of public TVET college qualifications;

Method 3: work integrated learning opportunities for University of Technology or Comprehensive University students completing their national diplomas; or

Method 4: structured workplace learning opportunities for candidates towards registration in a professional category by a statutory council listed in Table 1 above.

Employed learners may not account for more than 33 percent of the contract skills development goal. Not more than one method may be applied to any individual concurrently in the calculation of the contract skills development goal. The principle is that an individual can only be counted once towards the CSDG.

Not more than one method may be applied to any individual concurrently in the calculation of the contract skills development goal.

Contract Skills Development Goal Credits

Contract skills development credits will not be awarded for learners enrolled as beneficiaries of other funded or subsidised programmes.

In the case of engineering and construction works, design and build and services contracts:

- The contract skills development goals shall be granted by multiplying the number of People employed by the Service Providers and placed for continuous training opportunities in a three-month period by the notional values contained in Table 3, or as revised in a Gazette notice.
- The Service Provider may source beneficiaries of the contract skills development goal from the cidb Skills Development Agency (SDA).
- All beneficiaries of the Standard must be registered with the cidb SDA.

NOTE: The role and function of a cidb SDA is outlined in the Standard, Annexure B.

Credits towards the contract skills development goal for professional services contracts shall be granted by summing the hours of structured workplace learning opportunities provided to P1 and P2 learners as well as professional candidates in accordance with the Act, Clause 3.3.

No more than 45 hours may be claimed per week for any individual.

Contract skills development goal credits shall be reduced to the extent that they fail to comply with the requirements of this standard.

The Service Provider shall achieve in the performance of the contract the contract skills development goal established in this Standard for developing skills through infrastructure contracts (March 2020).

Table 3: The notional cost of providing training opportunities per quarter

Type of Training Opportunity	Provision for stipends (Unemployed learners only)	Provisions for mentorship	Provisions for additional costs*	Total costs	
				Unemployed learners	Employed learners
Method 1					
Occupational qualification	R7 000	R0	R9 000	R16 000	R9 000
Method 2					
Unemployed TVET College graduates	R14 000	R0	R9 000	R23 000	N/A
Method 3					
P1 and P2 learners, or a 240 credits qualification	R24 000	R20 000	R4 500	R48 500	N/A
Method 4					
Candidates with a 360 credits qualification	R37 000	R20 000	R4 500	R61 500	R20 000
Candidates with 480 or more credits qualification	R47 000	R20 000	R4 500	R71 500	R20 000

* Additional provisions include provisions for personal protective equipment, insurance, medical assessments, course fees and trade tools (where applicable) assessment, moderation and monitoring of learners.

NOTE:

- i) Where an unemployed learner is employed directly by the Service Provider, the Service Provider shall pay the stipend directly to the learner
- ii) Where an unemployed learner is sourced through an SDA, training provider or skills development facilitator the Service Provider must pay the stipend to the SDA, training provider or skills development facilitator who in turn will pay the learner
- iii) The notional cost of providing training opportunities will be increase by CPI on an annual basis. The new, revised costs will be published on the cidb website on 1 April in each year.

The Employer requires that employees of the state be seconded to the Service Provider in order to be provided with structured workplace learning opportunities in accordance with the provisions of this standard. The specified number of employees of the state is N/A . The Employer shall provide a list of persons for selection by the Service Provider as prescribed in the implementation guidelines. Persons selected by the Service Provider shall be seconded to the Service Provider under the terms and conditions prescribed in the implementation guidelines.

Where the contract is part of a Strategic Infrastructure Project (SIPs) the Service Provider will be required to report to the Presidential Infrastructure Coordinating Council through the respective SIP Skills Coordinators linked to the office of the SIP Coordinator, using the approved PICC reporting template.

Credits towards the contract skills development goal shall be denied where the Service Provider fails to comply in terms of Clause 3.4 of the Act. Compliance requirements shall be in terms of Clause 4 of the Act and records to be provided to be in accordance with Clause 5 of the Act.

Role and Functions of the Skills Development Agency

The Skills Development Agency (SDA) will provide career management and compliance reporting functions for all learners for CSDG compliance in terms of this Standard. Where the Service Providers provide direct employment to unemployed learners, or enrolls own employees for CSDG compliance, the Service Provider shall register them with the cidb SDA. The SDA can also act as an employment intermediary for unemployed learners.

The roles and functions of the Skills Development Agency (SDA) are summarised below.
Career Management and Compliance Reporting

The Service Provider shall enter into a contract agreement with the cidb SDA, training provider or skills development facilitator to manage their learners according to the provisions given below:

- a) preparing training plans for registered learners, including details of the scope of experiential work to be covered and expected outcomes;
- b) registering learners with the appropriate Sector Educational and Training Authority established in terms of the Skills Development Act of 2008 (Act 37 of 2008);
- c) conducting entry and exit level medicals for learners at the conclusion of each placement opportunity;
- d) providing personal protective equipment;
- e) liaising with the supervisor to monitor onsite training progress of learners;
- f) liaising with the supervisor to arrange for summative assessments at appropriate stages of the training; and
- g) liaising with the supervisor to prepare reports for the Employer's representative and cidb at practical completion of the contract.

The relevant training provider or skills development facilitator shall invoice the Service Providers for the provision of these services as per cost schedule in Table 3.

The cidb SDA shall open a trust fund to ring-fence monies essential for all learner requirements where necessary provided for in this standard such as personal protective equipment, medical assessments, insurance, course fees, monitoring as well as top up training and assessment.

Employment Intermediary

The cidb SDA can act as an employment intermediary for unemployed learners and provide Service Providers with learners qualifying for participation in the CSDG, as well as managing their employment functions such as payment of stipends, workman's compensation, provision of personal protective equipment, trade specific tools, etc.

In such cases, the Service Provider shall contract directly with an SDA, training provider or skills development facilitator of their choice for the recruitment, placement and management of learners. The Service Provider shall pay the SDA, training provider or skills development facilitator in accordance with the notional costs provided for in this standard, or as amended by a Gazette.

Sanctions

Failure by the Service Provider to achieve the total Notional Cost of the Contract Skills Development Goal (Excluding VAT), as indicated in the pricing schedule item, will result in a penalty of 30% of the value of the portion not achieved, unless the Service Provider can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

C4: SITE INFORMATION

(Refer to the heading "Description of the Services", sub-heading "Information available from Employer" under C3 above for each professional Service comprising the Service Provider.)

Annexure A

PROFESSIONAL FEES IN RESPECT OF AN ENGINEER'S APPOINTMENT (ALL DISCIPLINES)

**National Department of Public Works & Infrastructure
Scope of Engineering Services and Tariff of Fees
for Persons Registered In terms of the
Engineering Profession Act, 2000 (Act No. 46 of 2000)**

1 April 2016

2016 NDPWI - Scope of Engineering Services and Tariff of Fees

**National Department of Public Works & Infrastructure
Scope of Engineering Services and Tariff of Fees
for Persons Registered in terms of the
Engineering Profession Act, 2000,
(Act No.46 of 2000)**

The commencement date of this document

shall be

1 April 2016

2016 National Department of Public Works & Infrastructure: Scope of Engineering Services and Tariff of Fees for Registered Professionals

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1. PREAMBLE

This document is based on 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)" determined by the Engineering Council of South Africa under Section 34(2) of the Engineering Profession Act, 2000 (Act No. 46 of 2000) and published under Government Gazette No 34875 Board Notice 206 of 20 December 2011 (ECSA Guideline Fee Scales).

Changes have been made to the ECSA Guideline Fee Scales to reflect the specific requirements of the National Department of Public Works for professional engineering appointments/contracts. The services to be provided by the consulting engineer and the corresponding remuneration have been set out herein for projects implemented by or on behalf of the National Department of Public Works and were determined with consideration of the factors put forward in the ECSA Guideline Fee Scales.

The Scope of Services and Tariff of Fees described herein are generally applicable and are referred to in the agreement. Specific requirements with regards to the Scope of Services and the Tariff of Fees shall be set out in the agreement and should any requirement of the agreement be in conflict with the requirement of this document, the requirement of the Agreement shall prevail.

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

This document allows for four different methods of remuneration namely:

- (1) Fees for Normal Services (percentage fee based on the cost of works),
- (2) Fees for Additional Services (fees for services additional to those provided for in the Normal Services),
- (3) Time based fees and
- (4) Expenses and costs.

Words or expressions in bold font are defined in clause 2.2.

2. GENERAL PROVISIONS

2.1 Generality of Terms

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

- (1) the masculine includes the feminine,
- (2) the singular includes the plural, and
- (3) any reference to a natural person includes a juristic person.

2.2 Definitions

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

- (1) **Agreement** means the Letter of Appointment/Acceptance or the Professional Services Contract.
- (2) **Client** means any juristic person or organ of the State engaging a consulting engineer for services on a project.
- (3) **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.
- (4) **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.
- (5) **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.

- (6) **Cost of the works** means the total amount, exclusive of value added tax, certified or which would normally be certifiable for payment to contractor(s) (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 –
 - a *pro rata* portion of all preliminary and general items applicable to the works and
 - 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.
- (7) **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.
- (8) **Engineering Project** means a project of which the scope comprises mainly engineering work of one discipline only and all financial and administrative matters are dealt with by the consulting engineer or where the consulting engineer will act as principal agent where other disciplines are also involved.
- (9) **Multi-disciplinary 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.
- (10) **Normal services** means the services set out in clause 3.2.
- (11) **Principal Agent** means the Professional Service Provider appointed as such.
- (12) **Project** means any total scheme envisaged by a client, including all the works and services concerned.
- (13) **Services** means the services contemplated in clause 3 on a project for which a consulting engineer is engaged.
- (14) **Stage** means a stage of normal services set out in clause 3.2.
- (15) **The Act** means the Engineering Profession Act, 2000 (Act No. 46 of 2000).
- (16) **Total annual cost of employment** means the total annual cost of employment as defined in clause 4.4(4).
- (17) **Works** means the activities on a project for which contractor(s) are under contract to the client to perform or are intended to be performed, including the supply of goods and equipment.

2.3 Short Title

This document is called the "2016 NDPWI – Scope of Engineering Services and Tariff of Fees".

3. SCOPE OF SERVICES

3.1 Planning, Studies, Investigations and Assessments Reports

These services, as indicated below, relate to carrying out studies and investigations as well as the preparation and submission of reports embodying preliminary proposals or initial feasibility studies and will normally be remunerated on a time and cost basis.

- (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 decisions on 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, investigating and collating available data, drawings and plans relating to the works.
- (7) Investigating financial and economic implications relating to the proposals, feasibility studies and/or option analysis and recommendations.

- (8) Clause 3.1(7) does not normally apply to **civil and structural services on multi-disciplinary projects**, except as far as the Interpretation of cost figures for **civil and structural services** are concerned.

Deliverables:

- Submission of a report for consideration by the **client**, including all or any of the above, with emphasis on the following:
 - Collation of information.
 - Reports on technical and financial feasibility and related implications.
 - List of consents and approvals.
 - Schedule of required surveys, tests, analyses, site and other investigations.
 - Comparison of **project** options, including life cycle costing and recommendations where required.

3.2 Normal Services

These services are applicable to projects where the nature, form and function of the facility has been defined through previous investigations and reports and the engineering services are required to take the **project** through to successful completion of construction.

3.2.1 Stage 1 – Inception

(Defined as: Establish **client** requirements and preferences, assess user needs and options, appointment of necessary consultants, and establish the **project** brief including **project** objectives, priorities, constraints, assumptions aspirations and strategies.)

- (1) Assist in developing a clear **project** brief.
- (2) Attend **project** initiation meetings.
- (3) Advise on procurement policy for the **project**.
- (4) Advise on the rights, constraints, consents and approvals.
- (5) Define the scope of **services** and scope of work required.
- (6) Conclude the terms of the **agreement** with the **client**.
- (7) Inspect the site and advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for **Stage 2** including the availability and location of infrastructure and services.
- (8) Determine the availability of data, drawings and plans relating to the **project**.
- (9) Advise on criteria that could influence the **project** life cycle cost significantly.
- (10) Provide necessary information within the agreed scope of the **project** to other consultants involved.

Deliverables:

- Submission of a report for consideration by the **client**, including all or any of the above, with emphasis on the following:
 - Agreed scope of **services** and scope of work.
 - Signed **agreement**.
 - Report on **project**, site and functional requirements.
 - Schedule of required surveys, tests, analyses, site and other investigations.
 - Schedule of consents and approvals.

3.2.2 Stage 2 – Preliminary Design: Concept and Viability

(Defined as: Prepare and finalise the **project** concept in accordance with the brief, including project scope, scale, character, form and function, plus preliminary programme and viability study/ assessment of the **project**.)

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) Agree documentation programme with principal consultant and other consultants involved.
- (2) Attend design and consultants' meetings.
- (3) Establish the concept design criteria.
- (4) Prepare initial concept design and related documentation.
- (5) 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 presented by the **consulting engineer** based on the interpretation of the results of these tests and investigations including geotechnical and/or foundation investigations, in a report containing recommendations to be applied to and incorporated in designs. The **consulting engineer** will also take the environmental management plan into account for the full life cycle 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) Refine and assess the concept design to ensure conformance with all regulatory requirements and consents.
- (8) Establish access, utilities, services and connections required for the design of the **project**.
- (9) Coordinate design interfaces with other consultants involved.
- (10) Prepare process designs (where required), preliminary designs including preliminary drawings and plans, and related documentation for approval by authorities and **client**, including costing of the aforementioned.
- (11) Provide cost estimates and life cycle costs including financial implications and preliminary programmes.
- (12) Liaise, co-operate and provide necessary information to the **client**, principal consultant and other consultants involved.

Deliverables:

- Submission of a report for consideration by the **client**, including all or any of the above, with emphasis on the following:
 - Concept design report.
 - Schedule of required surveys, tests and other investigations and related reports.
 - Process design report.
 - Preliminary design report.
 - Cost estimates, concept and viability reports which include all or any of the above.

3.2.3 Stage 3 – Detail Design

(Defined as: Finalise the design, outline specifications, cost plan, financial viability and programme for the **project**.)

- (1) Review documentation programme with principal consultant and other consultants involved.
- (2) Attend design and consultants' meetings.
- (3) Incorporate **client's** and authorities' detailed requirements into the design.
- (4) Incorporate other consultant's designs and requirements into the design.
- (5) Prepare design development drawings including draft technical details and specifications.
- (6) Prepare detail designs, and design drawings including draft technical details and specifications:
 - In the case of reinforced concrete works, drawings must include bending schedules.
 - In the case of structural steel works, 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 **contractor(s)** or other parties are required. The **consulting engineer** need not provide shop drawings for the manufacture of the structural steel works.
- (7) Review and evaluate design, specifications and estimates of the **cost of works** in order to finalise the detail design **stage**.

- (8) 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**.
- (9) Liaise, co-operate and provide necessary information to the principal consultant and other consultants involved.
- (10) Submit the necessary design documentation to local and other authorities for approval and obtain said approval or alternatively for record purposes where approval is not required by Building Regulations.
- (11) Accommodate services design.

Deliverables:

- Submission of a report for consideration by the **client**, including all or any of the above, with emphasis on the following:
 - Detail design drawings.
 - Outline specifications.
 - Local and other authority submission drawings, reports and approvals.
 - Detailed estimates of construction costs.

3.2.4 Stage 4 – Documentation and Procurement

(Defined as: Prepare procurement and construction documentation, confirm and implement the procurement strategies and procedures for effective and timeous procurement of necessary resources for execution of the **project**.)

- (1) Attend design and consultants' meetings.
- (2) Prepare and finalise specifications, schedule of quantities and preambles for the **works**.
- (3) Submission of detailed estimates, capital and life cycle costs, financial implications and programmes for implementation of the **works**.
- (4) Reaffirm detailed cost estimates and adjust designs and documents if necessary to remain within approved budget.
- (5) Prepare and finalise the procurement strategy for **contractor(s)** or assist the principal consultant where relevant.
- (6) Prepare documentation for **contractor** procurement.
- (7) Assist in calling for tenders/bids and/or negotiation of prices and/or assist the principal consultant where relevant.
- (8) Liaise, co-operate and provide necessary information to the principal consultant and the other consultants as required.
- (9) Assist in the evaluation of tenders/bids.
- (10) Assist with the preparation of contract documentation for signature.
- (11) Assess samples and products for compliance and design intent.
- (12) 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**.
- (13) Placing orders for the **works** on behalf of the **client**.

Deliverables:

- Submission of a report for consideration by the **client**, including all or any of the above, with emphasis on the following:
 - Finalised Specifications.
 - Service co-ordination.
 - Detail design drawings.
 - Tender/bid documentation.
 - Tender/bid evaluation and report.
 - Tender/bid recommendation.
 - Priced contract documentation.

3.2.5 Stage 5 – Contract Administration and Inspection

(Defined as: Manage, administer and monitor the construction contracts and processes including preparation and coordination of procedures and documentation to facilitate practical completion of the works.)

- (1) Attend site handover.
- (2) Issue construction documentation in accordance with the documentation schedule including, in the case of structural engineering, reinforcing bending schedules and detailing and specifications of structural steel sections and connections.
- (3) Execute the contract administration in terms of the contract between the client and the contractor.
- (4) Prepare schedules of predicted cash flow.
- (5) Prepare pro-active estimates of proposed variations for client decision making.
- (6) Preparation of and issuing variation orders on behalf of and after consultation with the client.
- (7) Attend regular site, technical and progress meetings.
- (8) Inspect works for conformity to contract documentation.
- (9) Adjudicate and resolve financial claims by contractor(s).
- (10) Assist in the resolution of contractual claims by the contractor.
- (11) Assist the client in the resolution of disputes or differences that may arise between the client and the contractor, except mediation, arbitration and/or litigation.
- (12) Establish and maintain a financial control system.
- (13) Clarify details and descriptions during construction as required.
- (14) Assist and/or prepare valuations for payment certificates to be issued by the principal agent.
- (15) Witness and review of all tests and mock ups carried out both on and off site.
- (16) Check and approve contractor drawings for design intent.
- (17) Update and issue drawings and drawings register.
- (18) Issue contract instructions as and when required.
- (19) Agreeing and verifying final quantities during construction with the contractor.
- (20) Review and comment on operation and maintenance manuals, guarantee certificates and warranties.
- (21) Inspect the works and issue practical completion certificates and defects lists.
- (22) Arranging for the delivery of all test certificates, including the Electrical Certificate of Compliance, statutory and other approvals, as built drawings and operating manuals.
- (23) 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.

Deliverables:

- Submission of a report for consideration by the client, including all or any of the above, with emphasis on the following:
 - Schedules of predicted cash flow.
 - Construction documentation.
 - Register of drawings issued.
 - Estimates for proposed variations.
 - Contract instructions.
 - Financial control reports.
 - Valuations for payment certificates.
 - Progressive and draft final account(s).
 - Practical completion and defects list.
 - Electrical Certificate of Compliance.

Where a quantity surveyor is included in the project team in Multi-Disciplinary works, items 4, 5, 9 and 12 will not be required from the engineer.

3.2.6 Stage 6 – Close-Out

(Defined as: Fulfil and complete the project close-out including necessary documentation to facilitate effective completion, handover and operation of the project).

- (1) Inspect and verify the rectification of defects.
- (2) Prepare comments for relevant payment valuations and completion certificates.
- (3) Prepare and/or procure operations and maintenance manuals, guarantees and warranties.
- (4) Prepare and/or procure as-built drawings and documentation.
- (5) Agreeing final quantities with contractor(s), compiling final accounts and issuing final payment certificates.

Deliverables:

- Valuations for payment certificates.
- Works and final completion lists.
- Operations and maintenance manuals, guarantees and warranties.
- As-built drawings and documentation.
- Final accounts.

3.2.7 Targeted (Preferential) 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 (preferential) 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 contractor s and/or professional consultant.

3.3 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.

3.3.1 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 or procured 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) Preparing and setting out particulars and calculations in a special form required by any relevant authority.

- (11) 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 on time.
- (12) 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.
- (13) Investigating or reporting on tariffs or charges leviable by or to the **client**.
- (14) Advance ordering or reservation of materials and obtaining licenses and permit.
- (15) 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 advice 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.
- (16) Exceptional arrangements, communication, facilitation and agreements with any stakeholders other than the **client** and **contractor(s)** appointed for the **works** on which the **consulting engineer** provides **services**.
- (17) Any other additional **services**, of whatever nature, specifically agreed to in writing between the **consulting engineer** and the **client** prior to the execution thereof.

3.3.2 Construction Monitoring

- (1) If the **construction monitoring**, as set out in clause 3.2.5(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 3.2.5.

Applications for additional staff must be made on the department's prescribed format, together with which the **consulting engineer** must submit a proper motivation, containing *inter alia*, a schedule indicating the envisaged time to be spent on additional **construction monitoring** as applied for, as well as the envisaged time to be spent on normal **construction monitoring** as set out in clause 3.2.5(3).

- (2) Alternatively, the **client** may appoint or make available staff, as intended in clause 3.3.2(1), subject to approval by the **consulting engineer**.
- (3) Staff, as intended in clauses 3.3.2(1) and 3.3.2(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 or duration of **services** be necessary, the utilization of such persons and/or their remuneration must be agreed to 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) Where provided for in the **agreement**, the duties of the **consulting engineer** for the following defined levels of **construction monitoring**, respectively, are as follows:

(a) **Level 1:**

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) Where the **principal agent**, other than the **consulting engineer**, has been appointed for the **project**, provide such information as to enable the **principal agent** to fulfil his responsibilities.

- (iv) Be available to provide the contractor with technical interpretation of the plans and specifications.

(b) **Level 2:**

The construction monitoring staff shall:-

- (i) Maintain a full time presence on site to constantly review –
 - (a) Work procedures
 - (b) Construction materialsfor 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) Where the principal agent, other than the consulting engineer has been appointed for the project, provide such information as to enable the principal agent to fulfil his responsibilities.
- (iv) Be available to provide the contractor with technical interpretation of the plans and specifications.

3.3.3 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).

3.3.4 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.

3.3.5 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 contractor(s).

3.3.6 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 time required and **cost of the works**.
- (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 **contractor(s)**, excluding mediation, arbitration or litigation.
- (6) Approval of certificates for payment to **contractor(s)** 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 and provision of a close out report for the **project**.
- (9) Manage targeted procurement **services** as indicated in clause 3.2.7.

3.3.7 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. TARIFF OF FEES

4.1 Application of Tariff of Fees

- (1) The tariff of fees contained in this Schedule applies in respect of the **services** set out in clause 3 "Scope of Services".
- (2) The **client** shall remunerate the **consulting engineer**, for the **services** rendered, on the basis of clauses 4.2 and 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 4.1(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 document can be applied to many projects the factors that influence the fees to be paid for **services** 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 it is based on well established, common practices to more complex projects where it calls for the application of new, unusual or untried practices.
 - (b) **Cost of the works:** This may range from a situation where the **cost of the works** is abnormally high relative to the **services** being rendered to a project where the **cost of the works** is abnormally low relative to the **services** required from the **consulting engineer**.

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- (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 "Scope of Services".
- (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) Whether aspects related to labour intensive works need to be considered in the design.
- (5) Combinations of one or more of the above factors may require an adjustment of the tariffs to fairly compensate the consulting engineer and this adjustment 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 4.2.7 namely civil, structural, mechanical, electrical and electronic engineering services, a separate fee for services in each discipline should be calculated in accordance with the relevant clause. Where a consulting engineer is appointed for either or both electronic and electrical services, his payment shall be according to the electrical fee scales based on the combined value of these services.
- (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 4.1(8)(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 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 4.2.8.
- (b) Time based fees applicable when the services were rendered.
- (11) Disbursements as set out in clause 4.1(3) may be claimed monthly.

4.2 Fees for Normal Services

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.

Cost of the Works		Basis of Fee Calculation	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598 000	R 0	A Lump Sum or on Time Basis
R 598 000	R 1 419 000	R 74,800	12,5% on the balance over R 598 000
R 1 419 000	R 6,985,000	R 177,400	10,0% on the balance over R 1 419 000
R 6,985,000	R 14,248,000	R 734,000	9,0% on the balance over R 6,985,000
R 14,248 000	R 35 480 000	R 1,387,600	8,0% on the balance over R 14,248,000
R 35,480 000	R 70,961,000	R 3,086,200	6,0% on the balance over R 35,480,000
R 70,961,000	R 427,427,000	R 5,215,100	5,5% on the balance over R 70,961,000
R 427,427,000		R 24,820,700	5,0% on the balance over R 427,427,000

- (2) The following additional fee shall be 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 shall be cumulated for the determination of the cost of the reinforced concrete and structural steel works.

Cost of the Works		Basis of Fee Calculation	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598 000	R 0	A Lump Sum or on Time Basis
R 598 000	R 1 419 000	R 29,900	5,0% on the balance over R 598,000
R 1 419 000	R 6,985,000	R 71,000	4,5% on the balance over R 1,419,000
R 6,985 000	R 14,248 000	R 321,400	4,0% on the balance over R 6,985,000
R 14,248,000	R 35 480 000	R 611,900	3,0% on the balance over R 14,248,000
R 35,480 000	R 70,961,000	R 1,248,900	2,0% on the balance over R 35,480,000
R 70,961 000	R 427,427,000	R 1 958 500	1,5% on the balance over R 70,961,000
R 427,427,000		R 7,305,500	1,5% on the balance over R 427,427,000

- (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 excluded from the cost of the works, but the full cost of ballast and equipment specially designed by the consultant is 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 4.2.1(1) and 4.2.1(2) is 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 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 should be 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	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	1,25
Secondary roads	1,00
Informal roads	0,75
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
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. Only applicable where specifically appointed for service)	0,07

4.2.2 Civil Engineering Services pertaining to Multi-disciplinary Projects

- (1) The basic fee for normal services in the discipline of civil engineering, pertaining to multi-disciplinary 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	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598,000	R 0	A Lump Sum or on Time Basis
R 598,000	R 1,419,000	R 74,800	12,5% on the balance over R 598,000
R 1,419,000	R 6,985,000	R 177,400	10,0% on the balance over R 1,419,000
R 6,985,000	R 14,248,000	R 734,000	9,0% on the balance over R 6,985,000
R 14,248,000	R 35,480,000	R 1,387,600	8,0% on the balance over R 14,248,000
R 35,480,000	R 70,961,000	R 3,086,200	7,0% on the balance over R 35,480,000
R 70,961,000	R 427,427,000	R 5,569,900	7,0% on the balance over R 70,961,000
R 427,427,000		R 30,522,500	7,0% on the balance over R 427,427,000

- (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 4.2.2(1) is 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 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	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 Multi-disciplinary Projects

- (1) The basic fee for **normal services** in the discipline of structural engineering, pertaining to **multi-disciplinary 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	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598 000	R 0	A Lump Sum or on Time Basis
R 598 000	R 1 419 000	R 74 800	12,5% on the balance over R 598,000
R 1 419 000	R 6 985 000	R 177 400	10,0% on the balance over R 1 419,000
R 6 985 000	R 14 248 000	R 734 000	9,0% on the balance over R 6,985,000
R 14 248 000	R 35 480 000	R 1 387 600	8,0% on the balance over R 14,248,000
R 35 480 000	R 70 961 000	R 3 086 000	7,0% on the balance over R 35,480,000
R 70 961 000	R 427 427 000	R 5 570 000	7,0% on the balance over R 70,961,000
R 427 427 000		R 30 523 000	7,0% on the balance over R 427 427 000

- (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 4.2.3(1) is 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 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	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.

Cost of the Works		Basis of Fee Calculation	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598,000	R0	A Lump Sum or on Time Basis
R 598,000	R 1,419,000	R74,800	12,5% on the balance over R 571 000
R 1,419,000	R 6,985,000	R177,400	10,0% on the balance over R 1 353 000
R 6,985,000	R 14,248,000	R734,000	8,0% on the balance over R 6 659 000
R 14,248,000	R 35,480,000	R1,315,000	7,0% on the balance over R 13 582 000
R 35,480,000	R 70,961,000	R2,801,300	6,0% on the balance over R 33 824 000
R 70,961,000	R 427,427,000	R4,930,100	5,5% on the balance over R 67 648 000
R 427,427,000		R24,535,700	5,5% on the balance over R 407 474 000

- (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 4.2.4(1) is 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 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	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. Only applicable where specifically appointed for service)	0,07

4.2.5 Mechanical Engineering services pertaining to Multi-disciplinary Projects

- (1) The basic fee for normal services in the discipline of mechanical engineering or wet services, pertaining to multi-disciplinary 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	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598,000	R0	A Lump Sum or on Time Basis
R 598,000	R 1,419,000	R89,700	15,0% on the balance over R 571 000
R 1,419,000	R 6,985,000	R212,900	12,5% on the balance over R 1 353 000
R 6,985,000	R 14,248,000	R908,600	10,5% on the balance over R 6 659 000
R 14,248,000	R 35,480,000	R1,671,200	9,5% on the balance over R 13 582 000
R 35,480,000	R 70,961,000	R3,688,300	9,0% on the balance over R 33 824 000
R 70,961,000	R 427,427,000	R6,881,500	8,5% on the balance over R 67 648 000
R 427,427,000		R37,181,200	8,5% on the balance over R 407 474 000

- (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 4.2.5(1) is 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 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	Factor by which basic fee is multiplied
Multi-tenant installations: <i>The Multi-tenant factor only becomes applicable if substantial fragmentation of services, which would otherwise not be divided, occurs as a result of the multi-tenant application. Normal multi-zoning, even if applied in multi-tenant accommodation, does not qualify for the application of the Multi-tenant factor.</i>	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 572,000 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
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors. Only applicable where specifically appointed for service)	0,07

4.2.6 Electrical and Electronic Engineering Services pertaining to Engineering Projects

- (1) The basic fee for normal services in the discipline of electrical and electronic 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.

Cost of the Works		Basis of Fee Calculation	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598 000	R0	A Lump Sum or on Time Basis
R 598 000	R 1 419 000	R74,800	12,5% on the balance over R 571 000
R 1 419 000	R 6,985,000	R177,400	10,0% on the balance over R 1 353 000
R 6,985,000	R 14,248,000	R734,000	8,0% on the balance over R 6 659 000
R 14,248,000	R 35,480,000	R1 315,000	7,0% on the balance over R 13 582 000
R 35,480,000	R 70,961,000	R2,801,300	6,0% on the balance over R 33 824 000
R 70,961,000	R 427,427,000	R4,930,100	5,5% on the balance over R 67 648 000
R 427,427,000		R24,535,700	5,5% on the balance over R 407 474 000

- (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 4.2.6(1) is 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 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	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. Only applicable where specifically appointed for service)	0,07

4.2.7 Electrical and Electronic Engineering services pertaining to Multi-disciplinary Projects

- (1) The basic fee for **normal services** in the discipline of electrical and electronic engineering, pertaining to **multi-disciplinary 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	
Where the costs of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 0	R 598 000	R0	A Lump Sum or on Time Basis
R 598 000	R 1,419,000	R89,700	15,0% on the balance over R 571 000
R 1,419,000	R 6,985,000	R212,900	12,5% on the balance over R 1 353 000
R 6,985,000	R 14,248,000	R908,600	10,5% on the balance over R 6 659 000
R 14,248,000	R 35,480,000	R1,671,200	9,5% on the balance over R 13 582 000
R 35,480,000	R 70,961,000	R3,688,300	9,0% on the balance over R 33 824 000
R 70,961,000	R 427,427,000	R6,881,500	8,5% on the balance over R 67 648 000
R 427,427,000		R37,181,200	8,5% on the balance over R 407 474 000

- (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 4.2.7(1) is 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 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	Factor by which basic fee is multiplied
Multi-tenant installations: <i>The Multi-tenant factor only becomes applicable if substantial fragmentation of services, which would otherwise not be divided, occurs as a result of the multi-tenant application. Normal multi-zoning, even if applied in multi-tenant accommodation, does not qualify for the application of the Multi-tenant factor.</i>	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 572,000 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
Targeted procurement (Additional fee based on the basic fees before the application of any of the other factors. Only applicable where specifically appointed for service)	0,07

4.2.8 Services provided partially or in Stages

- (1) The following table shall be used for proportioning the basic fee for normal services over the various stages of the services.

Stage of Services	Percentage points for each stage
Civil: Engineering Projects: <ul style="list-style-type: none"> • Inception • Preliminary Design: Concept and Viability • Detail Design • Documentation and Procurement • Contract Administration and Inspection • Close-Out 	5 20 30 15 25 5
Structural: Engineering Projects: <ul style="list-style-type: none"> • Inception • Preliminary Design: Concept and Viability • Detail Design • Documentation and Procurement • Contract Administration and Inspection • Close-Out 	5 20 30 15 25 5
Civil: Multi-disciplinary Projects: <ul style="list-style-type: none"> • Inception • Preliminary Design: Concept and Viability • Detail Design • Documentation and Procurement • Contract Administration and Inspection • Close-Out 	5 20 30 15 25 5
Structural: Multi-disciplinary Projects: <ul style="list-style-type: none"> • Inception • Preliminary Design: Concept and Viability • Detail Design • Documentation and Procurement • Contract Administration and Inspection • Close-Out 	5 20 30 15 25 5
Mechanical, electrical and electronic projects: <ul style="list-style-type: none"> • Inception • Preliminary Design: Concept and Viability • Detail Design • Documentation and Procurement • Contract Administration and Inspection • Close-Out 	5 20 30 15 25 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.

4.2.9 Cancellation or Abandonment

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 4.2.8(1) and the whole or part of the works is cancelled or abandoned or postponed payments will be according to the stipulations of this agreement.

4.3 Fees for Additional Services

- (1) Subject to clauses 4.2.8(2), 4.3(2), 4.3(3), 4.3(4), 4.3(5), 4.3(6) and 4.3(7), the fees for additional services, contemplated in clause 2.2, are agreed to between the client and the consulting engineer as set out in clause 4.1.
- (2) 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.
- (3) For the provision of a construction monitoring service, as contemplated in clause 3.3.2, the consulting engineer is entitled to recover from the client the fees as agreed between the consulting engineer and the client:
 - (a) for part time construction monitoring staff costs, the amount payable to such staff shall be at the hourly rates contemplated in clause 4.4(3);
 - (b) for full time construction monitoring service the fee shall be based on the total annual cost of employment plus a surcharge of twelve percentage points (12%);
 - (c) a maximum of 50 hours may be applied for part time construction monitoring per month. Time spent on site in excess hereof will be without further remuneration; and
 - (d) distances for travelling applied for may not be exceeded without prior written approval of the departmental project manager. Remuneration of travelling will be calculated according to actual distances per month at the applicable rate of the time of travel.
- (4) For all other costs, as set out in clause 4.5, the actual expenses incurred.
- (5) For duties under the Occupational Health and Safety Act, 1993 (Act No.85 of 1993), as contemplated in clause 3.3.3, the consulting engineer shall, if so appointed by the client, be remunerated on a time and cost basis as agreed with the client.
- (6) For assuming the leadership of a joint venture, a consortium or team of consulting engineers, as contemplated in clause 3.3.5, the fee for the lead consulting engineer shall be ten percentage points (10%), which is not an additional fee but is that portion of the fee for services rendered by the team, which shall be allocated to the lead consulting engineer. The apportionment of the fee to services is as stated in clause 4.2.8(1).
- (7) For services as principal agent of the client, as contemplated in clause 3.3.6, the consulting engineer is 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.

4.4 Time Based Fees

- (1)
 - (a) 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.
 - (b) Time based fees are calculated by multiplying the hourly rate contemplated in clause 4.4(3), which is applicable to the consulting engineer for professional and any other technical staff employed by the consulting engineer, with the actual time spent by such staff in rendering the services required by the client.
 - (c) Professional and 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 professional and technical staff concerned is 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 or takes full responsibility for the projects and related liabilities of such practice and where his/her 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 scale of fees on a time basis, on which Value Added Tax is excluded, shall be at the following rates per hour, rounded off to the nearest rand:
- (a) for a person in category A and B: 18.75 cents for each R100 of the total annual remuneration package (lowest notch) attached to a Director's grading (level 13) in the Public Service;
- (b) for a person in category C: 17,5 cents for each R100 of the total annual remuneration package (lowest notch) attached to a Deputy Director's grading (level 12) in the Public Service;
- (c) for a person in category D: 16,5 cents for each R100 of his/her total annual cost of employment; provided that this hourly rate shall not exceed 16,5 cents for each R100 of the total annual remuneration package (lowest notch) attached to an Assistant Director's grading (level 11) in the Public Service.

Hourly rates calculated in terms of (a), (b) and (c) above shall be deemed to include overheads and charges in respect of time expended by clerical personnel, which shall, therefore, not be chargeable separately.

Unless otherwise specifically agreed in writing, remuneration for the time expended by *Category B persons* in terms of (a) above on a project shall be limited to 5 per cent of the total time expended on the project. Any time expended by principals in excess of the 5 per cent limit shall be remunerated at the rates determined in (b) or (c) above.

Notwithstanding the above, where work is of such a nature that personnel as described in paragraph (c) above are capable of performing such work, it shall be remunerated at that level and not at the rates described in paragraphs (a) and (b) above, irrespective of who in fact executed the work.

The salaries referred to in (a) to (c) above can change from time to time, which will, therefore, change the rates applicable. These rates will, however, only be adjusted on the first day of each calendar year irrespective of any changes in salary ranges during the relevant year. The rate as set out in Table 8 of the "Rates for Reimbursable Expenses", as amended from time to time may be used as bases for relevant claims.

- (4) For the purposes of clause 4.4(3)(c), the total annual cost of employment (gross annual remuneration) of a person contemplated in clause 4.4(2) 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 of appointment of the person.

4.5 Expenses and Costs

All expenses and costs shall be claimed for in accordance with the provisions of the agreement subject to the submission of substantiating documentation.

Annexure B

2015 NDPWI - Scope of Architectural Services and Tariff of Fees



**National Department of Public Works & Infrastructure
Scope of Architectural Services and Tariff of Fees
In respect of services rendered by a person registered
in terms of section 19(2) of the Architectural Profession Act, 2000
(Act No. 44 of 2000)**

The commencement date of this document shall be

1 October 2015

This document is hereafter referred to as the
"2015 NDPWI - Scope of Architectural Services and Tariff of Fees"

NATIONAL DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE

A Professional Fees for Architects 2015

PROJECT COST-BASED FEE

Cost Bracket	Value of Works (excl. VAT)		Primary Fee	Plus Secondary Fee	
	From	To		Add %	On Balance Over
	A	B		D	E
1	R 1	R 200 000	R 18 000	14.00%	R 1
2	R 200 001	R 650 000	R 46 000	13.50%	R 200 001
3	R 650 001	R 2 000 000	R 106 750	12.00%	R 650 001
4	R 2 000 001	R 4 000 000	R 268 750	10.50%	R 2 000 001
5	R 4 000 001	R 6 500 000	R 478 750	10.00%	R 4 000 001
6	R 6 500 001	R 13 000 000	R 728 749	9.50%	R 6 500 001
7	R 13 000 001	R 40 000 000	R 1 346 249	9.00%	R 13 000 001
8	R 40 000 001	R 130 000 000	R 3 776 249	8.50%	R 40 000 001
9	R 130 000 001	R 260 000 000	R 11 426 249	8.25%	R 130 000 001
10	R 260 000 001	R 520 000 000	R 22 151 249	8.00%	R 260 000 001
11	R 520 000 001	R 1 040 000 000	R 42 951 249	7.75%	R 520 000 001
12	R 1 040 000 001		R 83 251 249	7.50%	R 1 040 000 001

Formula:

$$\begin{aligned}
 &\text{Professional Fee} \\
 &= \\
 &\text{Primary Fee (C) for applicable Cost Bracket of Value of Works} \\
 &+ \\
 &\text{Secondary Fee for applicable Cost Bracket of Value of Works} \\
 &\text{Calculated as (Applicable Value of Works minus Column E) x \% in terms of Column D}
 \end{aligned}$$

Example:

For Value of Works of		R 3 000 000
Primary Fee	is	R 268 750
Secondary Fee	is	(R 3 000 000 – R 2 000 001) x 10.50% R 999 999 x 10.50% R 104 999.90
Professional Fee	=	Primary Fee + Secondary Fee R 268 750 + R 104 999.90 R 373 749.90

The project cost based fee in Table A is based on the full scope of standard services being provided.

NATIONAL DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE

A Professional Fees for Architects 2015

PROJECT COST-BASED FEE

Cost Bracket	Value of Works (excl. VAT)		Primary Fee	Plus Secondary Fee	
	From	To		Add %	On Balance Over
	A	B		D	E
1	R 1	R 200 000	R 18 000	14.00%	R 1
2	R 200 001	R 650 000	R 46 000	13.50%	R 200 001
3	R 650 001	R 2 000 000	R 106 750	12.00%	R 650 001
4	R 2 000 001	R 4 000 000	R 268 750	10.50%	R 2 000 001
5	R 4 000 001	R 6 500 000	R 478 750	10.00%	R 4 000 001
6	R 6 500 001	R 13 000 000	R 728 749	9.50%	R 6 500 001
7	R 13 000 001	R 40 000 000	R 1 346 249	9.00%	R 13 000 001
8	R 40 000 001	R 130 000 000	R 3 776 249	8.50%	R 40 000 001
9	R 130 000 001	R 260 000 000	R 11 426 249	8.25%	R 130 000 001
10	R 260 000 001	R 520 000 000	R 22 151 249	8.00%	R 260 000 001
11	R 520 000 001	R 1 040 000 000	R 42 951 249	7.75%	R 520 000 001
12	R 1 040 000 001		R 83 251 249	7.50%	R 1 040 000 001

Formula:

$$\begin{aligned}
 &\text{Professional Fee} \\
 &= \\
 &\text{Primary Fee (C) for applicable Cost Bracket of Value of Works} \\
 &+ \\
 &\text{Secondary Fee for applicable Cost Bracket of Value of Works} \\
 &\text{Calculated as (Applicable Value of Works minus Column E) x \% in terms of Column D}
 \end{aligned}$$

Example:

For Value of Works of		R 3 000 000
Primary Fee	is	R 268 750
Secondary Fee	is	(R 3 000 000 – R 2 000 001) x 10.50% R 999 999 x 10.50% R 104 999.90
Professional Fee	=	Primary Fee + Secondary Fee R 268 750 + R 104 999.90 R 373 749.90

The project cost based fee in Table A is based on the full scope of standard services being provided.

NATIONAL DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE

B Architectural Fees Explanatory Document 2015

1. FEES DESCRIPTION

- 1.1 Where the words and phrases are highlighted in the text of this 2015 NDPWI - Scope of Architectural Services and Tariff of Fees they shall bear the meaning assigned to them in clause 28.1 and where such words and phrases are not highlighted they shall bear the meaning consistent with the context.
- 1.2 The Department of Public Works (Department) appoints architects either from a nomination process or by way of fees tender/bid system. In both cases the specific appointment for and nature of the work shall be as indicated in the agreement(s) entered into by Department with the professional entity.
- 1.3 The general guideline for fees based on work performed shall be as indicated below but with the proviso that the appointment documentation may be more specific in certain areas and shall therefore have preference over this document.
- 1.4 Where the appointment is made on value based remuneration, the basic Value Based Fees as in table A above, shall form the basis for the remuneration of the architect. Specific inclusions and exclusions are listed below.
- 1.5 Where the appointment is made on an hourly basis, or a portion of the appointment carries hourly fees, the fee scales for hourly rates, as determined from time to time by the Department and available on the Department's website shall apply, unless different hourly rates were tendered, in which case such rates will apply.
- 1.6 Unless the agreement between the Department and the professional entity states differently, disbursements, which are available on the Department's website, will be as determined by the Department from time to time.
- 1.7 The Department appoints architects registered as professional architects with SACAP. Should the identification of work and/or demarcation of work, as may be gazetted by SACAP be accepted by the Department, this document, i.e. 2015 NDPWI - Scope of Architectural Services and Tariff of Fees, will be amended to take into account the scope of services as well as the fees attracted by the other categories of registration with respect to the architectural profession. However, unless otherwise clearly stated, this appointment is for firms offering services in the category of registered professional architect. Where services of architectural professionals registered with SACAP in categories other than professional architect may be employed by the Department, the services to be rendered and functions to be fulfilled are informed by the 'Identification/demarcation of work for Architectural Professionals', as may be separately determined by SACAP and as may be reflected in the agreement entered into with the Department.
- 1.8 The Department may from time to time request sight of the registration status of an appointed architectural consultant, irrespective of the category of registration.

2. DESCRIPTION OF STANDARD SERVICE

In a standard service the architect is appointed to fulfil the obligations provided for in the appointment agreement, which in turn is informed by the exposition of the work stages below as well as the inclusions and/or exclusions listed in this document. The Manual for Private Architects PW147 contains further information pertaining to the work and function of the architect and must be read with this document.

3. BRIEF EXPOSITION OF WORK STAGES

The essential functions of each work stage relevant to the service are identified herein as:

3.1 STAGE 1: INCEPTION

Receive, appraise and report on the client's requirements with regard to:

- (a) The client's brief;
- (b) The site, rights and constraints;
- (c) Budgetary constraints;
- (d) The need for consultants;
- (e) Project programme;
- (f) Methods of contracting.

3.2 STAGE 2: CONCEPT AND VIABILITY (CONCEPT DESIGN)

Prepare an initial design and advise on:

- (a) The intended space provisions and planning relationships;
- (b) Proposed materials and intended building services;
- (c) The technical and functional characteristics of the design;
- (d) Check for conformity of the concept with the rights to use the land;
- (e) Review the anticipated costs of the project;
- (f) Review the project programme.

3.3 STAGE 3: DESIGN DEVELOPMENT

- (a) Confirm the scope and complexity;
- (b) Review the design and consult with local and statutory authorities;
- (c) Develop the design, construction system, materials and components;
- (d) Incorporate and co-ordinate all the services and work of the consultants;
- (e) Review the design, costing and programme with the consultants;
- (f) Obtain the approval of the Sketch Plan Committee in order to obtain approval from the department project manager to continue with stage 4.

3.4 STAGE 4: DOCUMENTATION AND PROCUREMENT

3.4.1 Stage 4.1 Prepare documentation sufficient for local authority submission:

- (a) Co-ordinate technical documentation with the consultants and complete primary coordination;
- (b) Prepare specification for the works;
- (c) Review the costing and programme with the consultants;
- (d) Submit documents for comments by the local authority and act on the comments made.

3.4.2 Stage 4.2 Complete construction documentation and proceed to call for tenders:

- (a) Obtain the authority of the Departmental project manager to prepare documents to procure offers for the execution of the works;
- (b) To obtain offers for the execution of the works;
- (c) Evaluate offers and recommend on the award of the building contract;
- (d) Prepare the contract documentation and arrange the signing of the building contract.

3.5 STAGE 5: CONSTRUCTION

- (a) Administer the building contract;
- (b) Together with the departmental project manager, give possession of the site to the contractor;
- (c) Issue construction documentation;
- (d) Initiate and/or check sub-contract design and documentation as appropriate;
- (e) Inspect the works for conformity to the contract documentation;
- (f) Administer and perform duties and obligations assigned to the principal agent in the JBCC building agreements, or fulfil the obligations provided for in other forms of contract;
- (g) Issue the certificate of practical completion;
- (h) Assist the client to obtain the certificate of occupation.

3.6 STAGE 6: CLOSE-OUT

- (a) Facilitate the project close-out including the preparation of the necessary documentation to effect completion, handover and operation of the project;
- (b) After the contractor's obligations with respect to the building contract are fulfilled, the architect shall issue the certificates related to contract completion;
- (c) Provide the client with as-built drawings.

4. ADDITIONAL SERVICES CARRYING ADDITIONAL FEES

The following services are additional to the standard services and rank for additional fees. These services may be added individually or in varying combinations and shall be provided by prior agreement between the Department and the architectural professional.

4.1 SPECIAL DESIGN SERVICES

The preparation of special designs within or in relation to the facilities which are contemplated in this service, which may include:

- (a) Rational design by other consultants – participate in the preparation of rational designs;
- (b) Town planning and/or urban design includes participation in the application for the establishment and/or amendment of regional and local town planning and urban design schemes and the amendment of title conditions, negotiations with interest groups and authorities;
- (c) Master planning – defining and planning the layout of future development of buildings and/or services on the same site;
- (d) Landscape design – participation in landscape planning and construction;
- (e) Interior design – the design or participation in the design of interiors and the selection of furnishings and fixtures and special finishes;
- (f) Liaison with special designers and specialist consultants;
- (g) Purpose-made items – the design and documentation of purpose made items, only to the extent that services in the relation thereto are deemed unreasonable to be regarded as part of standard services. Prior permission in this regard from the departmental project manager is necessary;
- (h) Promotional material and art work – participation in the preparation of;
- (i) Industrial plant operation and production layouts – participation in the definition and layout.

4.2 SPECIAL MANAGEMENT SERVICES

- (a) The setting up of a project execution plan by the architect shall be deemed normal to the duties of the architect;
- (b) Cost and valuation services – participation in the administration of costs and payments where a quantity surveyor has not been appointed;
- (c) Special inspections – more intensive inspections and assessment of the works than the norm to assess compliance with specifications.

4.3 SPECIAL STUDIES

- (a) Preparation of the client's brief – assist the client in the preparation of his requirements with regard to the purpose, scope, use of and operation of the project;
- (b) Site selection – research the suitability and location of a site for a proposed project;
- (c) Feasibility studies – participation in technical and/or economic feasibility studies;
- (d) Environmental studies – participation in environmental studies;
- (e) Energy studies and planning prepared by other consultants, but excluding basic architectural design incorporating sound planning for energy efficiency and maintenance;
- (f) Market surveys – participation in market surveys;
- (g) Traffic studies – participation in traffic flow studies.

4.4 WORK ON EXISTING PREMISES

Note: This item to be read in conjunction with items 10 and 11 below.

- (a) Surveys and inspections – inspect, survey, measure and prepare documentation of existing premises, with other consultants as needed. In cases where the nature of projects calls for repairs/renovation of existing buildings/structures, the cost of surveys and inspections is deemed to be covered by the increase of 30% covered in Item 10 below;
- (b) Restorations and renovations – services in connections with work on existing buildings;
- (c) Heritage buildings – services in connection with work on heritage buildings.

4.5 OTHER SERVICES

- (a) Participation in litigation and dispute resolution (where a concurrent service is rendered);
- (b) Mutually agreed additional services.

5. PROJECT VALUE BASED FEES FOR STANDARD AND PARTIAL SERVICES

5.1 The fees consist of a 'base fee' and a percentage of project cost; these derive from 'bracketed project values'.

5.2 The cost of the works:

5.2.1 The "cost of the works" or the "project cost" in respect of this service, shall mean the final value of the contract, including any amount of adjustment under any applicable contract price adjustment provision, of all the buildings in the project/complex included in the Architect's commission less items not regarded as an integral part of the project, or design of the works - refer to exclusions below.

5.2.2 The "cost of the works" or the "project cost" shall exclude any allowances in respect of contingencies.

5.2.3 Where the fees are based on an estimate, the estimate shall be the one accepted by the Department as representing the value of the works (which for purposes of interim payments will be deemed to be 80% of the consultant's estimate). If tenders were received but not awarded, the lowest tender price will be used as base for the calculation of fees, unless acceptable motivation can be provided to prove that such amount is unreasonable.

5.3 Table of categories of project types and the corresponding fee calculation method applicable for architects

	Project type and definition	Stage	Project cost based fees (base + percentage)	Additional fee	Time based fees
1	Construction (new projects) Building, assemble, establish fabrication of new buildings, structures, installations.	1 2 3 4.1 4.2 5 6	5% 15% 20% 20% 10% 27% 3% 100%	Not applicable	Not applicable
2	Construction new projects using NDPWI standard drawings	1 2 3 4.1 4.2 5 6	5% 15% 20% 20% 10% 27% 3 100%	Reduced fee of 0.75 on each of stages 2 to 4. Full fee on stages 1, 5 & 6	Not applicable
3	Additions only Build-on, additional, enlarge/extend existing accommodation, add on (increase).	1 2 3 4.1 4.2 5 6	5% 15% 20% 20% 10% 27% 3% 100%	Not applicable	For remeasuring and draughting existing structures
4	Repairs and renovations, rehabilitation (non-heritage) and upgrading Observable and recognizable damage, deterioration, broken (doors, locks, hinges, taps, etc.), worn, torn, disrepair.	1 2 3 4.1 4.2 5 6	5% 15% 20% 20% 10% 27% 3 100%	Not applicable	For remeasuring and draughting existing structures
5	Restoration (heritage) Repair, reconstruct, renew, rehabilitate – heritage buildings (historical) structures, objects (specialist knowledge of materials and methods).	1 2 3 4.1 4.2 5 6	5% 15% 20% 20% 10% 27% 3% 100%	+40% +40% +40% +40% +40% +40%	Remeasuring included in the 40% additional fee
6	Adaptation Change of function, new use	1 2 3 4.1 4.2 5	5% 15% 20% 20% 10% 27%	+10% +10% +10% +10% +10% +10%	For remeasuring and draughting existing structures

		6	3%	100%		
7	Alterations and additions Change, modify, adjust facility (same use).	1	5%		Not applicable	For remeasuring and draughting existing structures
		2	15%			
		3	20%			
		4.1	20%			
		4.2	10%			
		5	27%			
		6	3%	100%		
Note: 1 Repeat fees may be applicable to any/all of the above categories. 2 Hourly rates will apply when instructed by the Department.						

6. BUDGET FOR FEE PURPOSES

The project value fee for budget purposes excludes VAT, contingencies and provision for escalation.

7. PROJECT VALUE BASED FEES FOR A REDUCED SERVICE

Where the architect is not the principal agent:

A reduction of the fee for the work of 10% of the fee for stages 5 and 6 if the appointment was made according to a nomination process.

8. APPORTIONMENT OF FEES BETWEEN WORK STAGES

8.1 The fee applicable to each work stage is apportioned according to the table below and shall be current for the duration of the project.

8.2 In cases where a project was shelved or postponed for longer than two years after the initial appointment, due to reasons not attributable to the architect, the appointment is considered to have terminated. In such event, and should the same architect be re-appointed, such appointment will constitute a new agreement and fee arrangements prevailing at such time shall apply and/or be negotiated with the departmental project manager.

8.3 Fees for Work Stages

8.3.1 Table of stages

WORK STAGE	PROPORTIONAL FEE	CUMULATIVE TOTAL
1	5%	5%
2	15%	20%
3	20%	40%
4.1	20%	60%
4.2	10%	70%
5	27%	97%
6	3%	100%

9. FEES FOR ADDITIONAL SERVICES

Unless otherwise stipulated, the fee for additional services is time based, based on hourly rates as determined by the Department. Whenever these rates are revised the new rates shall apply to work performed after the date of publication of such revision.

10. FEES FOR A PROJECT THAT INCLUDES REPEATED BUILDINGS

10.1 For a project consisting of a number of repeated buildings erected under a single building contract, the fee will be reduced as indicated below provided the parts of the project are:

(a) Built on one site or a series of adjoining or closely related sites;

- (b) Either wholly apart from each other or linked with screen walls, common walls or other similar means;
- (c) Repeats of one or more prototype designs for units, blocks or elements and built from the repeated use of one or more sets of drawings and related documents with nominal or no modification for each re-use.

- 10.2 Full fee shall prevail for the origination of the first buildings, (known as prototypes) prior to the repeated buildings, thereafter fee adjustment is applied to the repeated buildings.
- 10.3 The reduced fee is 50% of the fee in table 5.3 above applied to work stages 1 through 4 inclusive.
- 10.4 The fee applicable to item 10.3 above is for working drawings/documentation and related documentation and the preparation of site and service plans for each repeated building.
- 10.5 The reduced fee does not apply to work stages 5 and 6. Fees for repeat buildings are therefore 35% + 30% = 65% of 100%.
- 10.6 Adjustment made to prototypical buildings shall attract fees at hourly rates.

11. FEES FOR BUILDINGS REPEATED UNDER SEPARATE BUILDING CONTRACTS

The re-use of drawings and documents on other sites for which the original architect is not appointed, will not entitle the original architect to additional fees.

12. FEES FOR AN APPOINTMENT WHERE THE ARCHITECT TAKES OVER INCOMPLETE WORK OF ANOTHER PRACTITIONER

The work stage shall be identified and an appropriate budget for the works shall be set. The fee for the incomplete work stage or the stage in which the service is commenced is subject to an increase of 15%. (Also called familiarization fee).

13. FEES FOR INSPECTION AND ADMINISTERING BUILDING CONTRACTS IF APPOINTED FOR THOSE STAGES ONLY

The fee for inspecting and administering building contracts (i.e. when only work stages 5 and 6 are required) is 30 per cent of the total fee based on the final cost of each project. A familiarization fee at hourly remuneration rates, up to a maximum of 15% of the fee for work stage 4 may be claimed.

14. FEES FOR DEPLOYMENT OF EMPLOYEES

Where an employee of the architectural professional is deployed on site for extended inspection or other appointed purpose, the amount of the reimbursement shall be the total cost of employment X 1.12, plus site associated allowances X 1.1. PRM 033 – 1 shall apply and prior application is to be lodged with the project manager according to the agreement.

15. EXTENDED INITIAL CONTRACTUAL CONTRACT PERIOD

In the event of the initial contract period being exceeded by more than 10 per cent, through no fault of the architectural professional, the architect is to be remunerated for all additional work over and above the period exceeding the additional 10%, resulting from the extension of time. The hourly rates according to the then current departmental hourly rate together with related reimbursables shall apply.

16. ADJUSTMENT OF GUIDELINE FEES AND DISBURSEMENTS

The architect's fees and disbursements are based on the following parameters:

- (a) Scope of services;
- (b) Scope of the project/works;
- (c) Project programme;
- (d) Cost of the works;

- (e) Cost of the project;
- (f) Appointment of other consultants;
- (g) Appointment of a contractor(s).

Should any material variation to the parameters as stated occur, the fees and disbursements may be adjusted.

Adjustments to the project programme, commonly known as 'fast tracking' that require the application of additional resource(s) by the architect, may attract additional fees. The architect shall submit a proposal to the project manager for approval prior to the commencement of the enhanced service.

17. TRAVELLING TIME

Travelling time shall be remunerated as indicated in the agreement between the architect and the Department.

18. FEES ON TERMINATION OR ABANDONMENT BY THE CLIENT

Where the agreement is terminated, either in whole or in part or the works are abandoned or postponed, payments will be according to the stipulations of this agreement.

19. FEES FOR DISPUTE RESOLUTION SERVICES

For acting as expert witness, adjudicator or mediator, the fee will be the time charge fee increased by 50 per cent (150% of the fee).

Where projects are referred to dispute resolution, the architect retained on that project is to be reimbursed for the additional service.

20. PAYMENT OF PROFESSIONAL ACCOUNTS

- (a) The architect's accounts are due and payable on presentation and are payable within the contractually stipulated period.
- (b) The architect shall be entitled to render interim accounts as stipulated in the agreement.

21. REGULAR INVOICING

Interim payments will be according to the stipulations of the agreement.

In addition to the fees set out in this schedule, the Department shall reimburse the architectural professional for all disbursements properly incurred according to the stipulations of the agreement.

22. REIMBURSEMENT OF EXPENSES

In addition to the fees set out in this document, the Department shall reimburse the architectural professional for disbursements properly incurred according to the stipulations of the agreement.

23. PROFESSIONAL FEES

- (a) The basic Value Based Fees for architects, as in table A above, shall apply.
- (b) The basic fee shall be the sum of fees set out in columns C and D of the basic Value Based Fees.

24. FULL SERVICES SUBMITTED BY TENDER

In the event of a fee proposal being submitted by way of tender, the fee for full services shall be tendered as a percentage of table A above, before apportionment into work stages.

Where the architect is required to perform a portion of the full services only, only the relevant portion of the fee shall be paid.

25. EXCLUSIONS

Certain items and services, which are outside of the building(s) and/or which are regarded as items of equipment, irrespective whether these are located outside and/or to the building(s), are not regarded as an integral part of the architectural project or design of the works and consequently the cost of these items are to be excluded from the value of the works on which a percentage architectural fee is calculated.

The architect may, upon proof, be entitled to professional fees due to involvement in the design and/or specification of these items. Professional fees claimed on a percentage of the cost of the item exceeding 10% of the cost of the item will not be entertained. Time based fees relating to the items listed below may be submitted for consideration.

26. ITEMS NOT INTEGRALLY PART OF THE WORK OF THE ARCHITECT

The following are examples of items regarded as not being an integral part of the architectural project or design of the works.

The list of examples below is not exhaustive – should any uncertainties exist in this regard, the onus is on the architect to seek a ruling in writing from the departmental project manager. The architect may however be specifically appointed in writing to undertake work relating to the items below, in which case fees shall be identified in the appointment documentation. When the architect has, upon proof, fulfilled a coordinating and/or planning role in respect of the excluded items, a fee commensurate with the input made by the architect, but not exceeding 10% of the value of the items, may be claimed.

1. Roads, bridges, pathways, fencing and parking areas designed by the civil engineer. The civil engineer is involved in the detailed design but the architect may have inputs in terms of master planning, position, shape, route and landscaping considerations, and so forth, meant to complement the design of the building(s) and link up with the civil engineering work.
2. Layouts of sports fields and gardens other than primary placement when not done by the landscape architect.
3. Municipal connection fees.
4. Main(s) water supply, major water reticulation, reservoirs and water purification plants outside of the building(s).
5. Main electrical supply cables external to the building(s).
6. Electrical transformers, high tension gear, generating plants and uninterrupted power supply plants, irrespective of whether these are internal or external to the building(s).
7. Main collector and outfall sewers and sewage disposal plants external to the building(s).
8. Steam and water boilers specified by the engineer.
9. Pump and pumping equipment specified by the engineer.
10. Fire-fighting equipment specified by the engineer.
11. Projectors, audio visual equipment, television and computer equipment and electronic equipment, with the exception of primary placement.
12. X-ray, other medical equipment, laundry, sterilizing and incinerator equipment.
13. Artwork.
14. Landscaping, when designed by the landscape architect, in respect of Landscaping items, features, furniture etc. designed and/or specified by the landscape architect.
15. The sinking of boreholes including any pumping equipment, when specified by the engineer or persons other than the architect.
16. Preparation of the client's brief.
17. Site selection, survey and location.
18. Economic feasibility and market surveys.
19. Traffic engineering.
20. Town planning and urban design.
21. Master site planning and placement of future buildings.
22. Promotional material.
23. Procurement of loose furniture.
24. Procurement of electrical and mechanical plant, operational and production layouts and manuals.
25. Extended detailed inspection of the works where required by the client.

26. Sectional title preparation and documentation.
27. Additional services not contemplated in this document.
28. Provision of revised or supplementary documentation required by the client. However, as-built drawings form part and parcel of the basic services rendered to the Department.

27. INCLUSIONS

The following are examples of items regarded as being an integral part of the architectural project or design of the works on which full architect's fees may be calculated.

1. Electrical, water, sewage, steam, gas, IT and communication reticulation systems inside the building(s) except where entirely designed and specified by the engineer.
2. Air-conditioning and ventilation systems.
3. Lifts, escalators, travelators and other means of mechanical conveyance.
4. Fire detection, security systems and sprinkler systems.
5. Hot water generating equipment, e.g. geysers, calorifiers and solar water heaters.
6. Built-in refrigeration facilities and mortuary cabinets.
7. Kitchens and other fittings when designed/laid out by the architect.

28. DEFINITIONS AND INTERPRETATIONS

Where the words and phrases are highlighted in the text of this document they shall bear the meaning assigned to them and where such words and phrases are not highlighted they shall bear the meaning consistent with the context.

28.1 DEFINITIONS

"Agreement" means documents listed in the schedules which together form the agreement between the client and the consultant.

"Architect" means a person registered as a Professional Architect in terms of the Architectural Profession Act, Act no 44 of 2000, or the Professional Architect's practice constituted as a legal persona appointed to provide the architect's service for the project.

"Architectural professional" means a person registered in terms of the Architects Profession Act, Act no 44 of 2000.

"Budget" means the anticipated cost of the project and/or works; provided that estimates, on which the budget is based, shall be deemed to be valid for a period not exceeding 3 months.

"Building contract" means the JBCC 'Principal Building Agreement' (PBA) or such other building agreement entered into between the client and the contractor.

"Client" means the party appointing the architectural professional (here: the Department) to perform the services or any part thereof referred to in this document and referred to as the 'employer' in the JBCC PBA, or other similar building contract.

"Consultant" means professional persons or entities appointed by the client to provide services with respect to the project.

"Construction documentation" means graphic representations, plans, sections, elevations, site plans, specifications, construction details, service co-ordination information, schedules and such other documentation, details and descriptions as are within the reasonable competence of an architect which are sufficient to indicate and specify the scope of the works.

"Contract" means an agreement entered into by the client with a contractor for the execution of the works or part thereof. It may also be referred to as "building contract".

"Contractor" means the entity or entities contracting with the client for the execution of the works or part thereof.

"Inspection" means such periodic visits to, or in connection with, the works by the architectural professional as are necessary to establish conformity of the work to the contract documentation, and to provide on-site clarification and further information during the progress of the work.

"JBCC" means the Joint Building Contracts Committee suite of contract documentation, series 2000, code 2101 c July 2007 or subsequent editions thereof, and as amended from time to time.

"Practical completion" means the stage of completion where the works or a section thereof, as certified by the principal agent, is substantially complete and can effectively be used for the purpose intended.



"Principal agent" means the person appointed to fulfil the obligations of the JBCC Principal Building Agreement (as currently provided for in clause 5 of the JBCC PBA), or fulfil the similar obligations provided for in other forms of contract.

"Project" means the development for which the architectural professional and consultants are appointed and may not be limited to works.

"Registered" means a person whose professional competence has been recognized by SACAP.

"SACAP" means South African Council for the Architectural Profession, the Statutory Council governing the Architectural Profession.

"Works" means all work executed or intended to be executed according to the building contract.

28.2 INTERPRETATIONS

Any legislation referred to in this recommended fee scale shall be that which was applicable on the date of compilation of this document.

In this document, unless inconsistent with the context:

The word "deemed" shall be conclusive that something is fact, regardless of the objective truth.

- a. In formal service agreements, unless inconsistent with the context, the words "advise", "appoint", "approve", "authorise", "certify", "consent", "decide", "delegate", "designate", "instruct", "issue", "notify", "object", "reply", "request", and "specify" shall indicate an act required to be carried out in writing.
- b. The masculine gender includes the feminine and neuter genders and *vice versa*, the singular includes the plural and *vice versa* and persons shall include corporate bodies.
- c. The headings of clauses are for reference purposes only and shall not be taken into account in constructing the context thereof.
- d. All monetary amounts exclude tax, which tax shall be added to any amounts, which become due and payable.