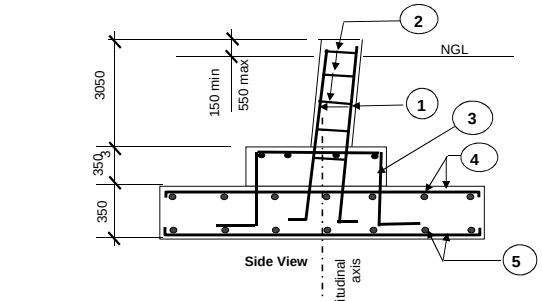
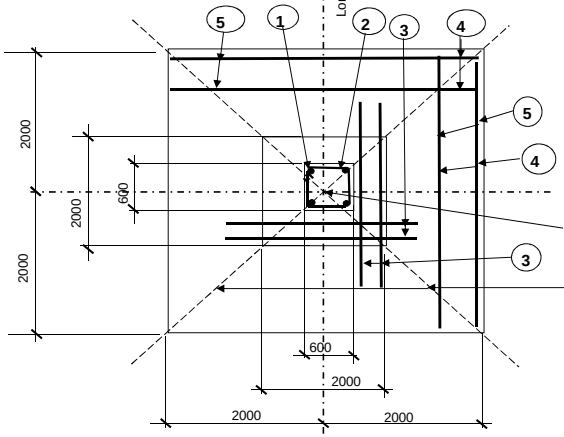




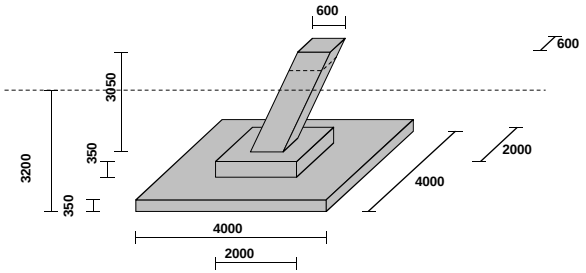
Transverse axis

Position of bottom end of tower stub

Diagonals along which the column and stub should be tilted with true angle towards the centre of the tower structure.

Plan View

General Layout (dashed line = NGL)



Bar Mark	Bending Schedule Shape (not to scale)	Bending Schedule: Shape Code	No. of bars	Dia mm	Length mm	a mm	b mm	c mm	d mm	Spacing mm
1	Column bars a	34	12	Y16	4100	3800				180
2	Column stirrups a	60	13	R10	2300	520	520			325
3	Box Face Bars a b c d	53	18	Y12	4300	650	576	1900	576	240
4	a Pad bars (top)	35	36	Y12	4150	3900				230
5	a Pad bars (bottom)	35	36	Y12	4150	3900				230
6	Stools b c a b	83	25	R10	900	200	214	150		±1000

Pricing Parameters

Steel Weight (kg)	Concrete Volume (m^3)	Formwork surface area (m^2)	Excavation volume (m^3)	Excavation surface area (m^2)	Stub weight (kg)
429.22	8.10	10.50	51.20	67.20	278.00

Quantities are based on dimensions of design drawings

NO Allowances have been made for material wastage or overbreak

Design Loads (incl. load factor)

Compression	Uplift	Transverse	Longitudinal	Moment
kN	kN	kN	kN	kN-m
1432.80	1214.40	73.20	9.60	0.0

Note:

1 Reinforcing layout diagrams are not to scale.
2 All design data and Construction to Specification TRMSCAAC1 Rev 5.
3 Concrete strength: 25 MPa minimum at 28 days.
4 Construction joint between column and the pad to be scabbled and painted with cement slurry or wet/dry epoxy.
5 Bottom end of tower stub is always in the centre of the pad in both the transverse and longitudinal directions
6 The Side and Plan Views are only schematic and not to scale.

Stub and column true angle (from vert)(maximum on diagonal line) 18.100 degrees

Min Cover required:
Pad: 50 mm
Column: 40 mm

Revision Description	Date	By	Rev No

Column & Pad Foundation (boxed version)
517F Tower
Type 2 Soil
Eskom Standard Design

Eskom

Disclaimer:
While due care has been applied in the design of this foundation, the contractor is required to verify that this design is fit for purpose considering preferred construction methodologies, geotechnical and structural requirements required at the point of application.

Designed:	Checked:	Revision:	Date:	Drawing No:
S DUDHIA	W H COMBRINCK	Rev0	22-May-2014	