



Project No: ORTDM SCMU 23-20/21

**OR TAMBO DISTRICT MUNICIPALITY
MQANDULI SECONDARY BULK WATER SCHEME PHASE 2 – CONTRACT 1**

29 January 2021

ADDENDUM No. 1

NOTICE TO TENDERERS

Tenderers for the abovementioned Contract are hereby notified as follows:

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM AS FOLLOWS:

1. Complete the attached acknowledgement of receipt and submit the completed form with your tender as part of the returnables (Section T2.2, Form CC).
2. No Addendums will be issued within (5) working days on the close of Tender.

Failure to acknowledge receipt of this Addendum by attaching it to the returnables may prejudice your Tender.

**THIS ACKNOWLEDGEMENT OF RECEIPT OF
ADDENDUM MUST BE SUBMITTED TOGETHER WITH
THE TENDER DOCUMENT**

OR Tambo District Municipality
OR Tambo House
Nelson Mandela Drive
Myezo Park
Mthatha
5100

Sir/Madam

Project No: ORTDM SCMU 23-20/21

MQANDULI SECONDARY BULK WATER SCHEME PHASE 2 – CONTRACT 1

ADDENDUM No. 1 (ONE)

I/We herewith acknowledge receipt of Addendum No 1 (One) for the above-mentioned Tender.

.....

SIGNATURE

.....

COMPANY

.....

DATE

ADDENDUM NO. 1

1. BILL OF QUANTITIES

Attached is the **revised** Bill of Quantities which supersedes the Bill of Quantities in the Tender Document.

The attached Bill of Quantities must be completed and submitted with the Tender.

2. DRAWINGS

Attached is the **revised** drawing (**DRG No.: ZCE063/FT/WA/C1/311 - Rev 1**) which supersedes the drawing (DRG No.: ZCE063/FT/WA/C1/311 - Rev 0) included in the Tender Document.

SECTION 1 : SABS 1200 A - GENERAL

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
1.1	8.3	FIXED-CHARGE AND VALUE RELATED ITEMS				
1.1.1	8.3.1	Contractual Requirements	Sum	1		
	8.3.2	Establishment of Facilities on the Site				
	8.3.2.1	Facilities for Engineer				
1.1.2	PSAB 3.2	a) Furnished offices (1No.)	Sum	1		
1.1.3		b) Telephone	Sum	1		
1.1.4		c) Nameboards (2 No.)	Sum	1		
	8.3.2.2	Facilities for Contractor				
1.1.5		a) Offices and storage sheds	Sum	1		
1.1.6		b) Workshops	Sum	1		
1.1.7		c) Laboratories	Sum	1		
1.1.8		d) Living accommodation	Sum	1		
1.1.9		e) Ablution and latrine facilities	Sum	1		
1.1.10		f) Tools and equipment	Sum	1		
1.1.11		g) Water supplies, electric power and communications	Sum	1		
1.1.12		h) Dealing with water (see 5.5)	Sum	1		
1.1.13		i) Access (see 5.8)	Sum	1		
1.1.14		j) Plant	Sum	1		
1.1.15	8.3.3	Other Fixed-charge Obligations	Sum	1		
1.1.16	8.3.4	Removal of Site Establishment	Sum	1		
1.1.17	PSA 8.3.5	Provision of a Materials Guarantee	Sum	1		
	PSA 8.4.6	Compliance with the OHS Act (1993, as amended), the Construction Regulations (2014) and the Particular Safety Specification:				
1.1.18	PSHSS 6.1.2; CR 5 (1)(l)	i) Preparation of the Contractor's site specific Health and Safety Plan	Sum	1		
1.1.19	CR 7(1)(b)	ii) Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Sum	1		
	GSR 2; PSHSS 7.7	iii) Provision of SABS Personal Protective Equipment				
1.1.20		(a) Hard Hats	No	30		
1.1.21		(b) Reflective vests	No	30		
1.1.22		(c) Protective foot wear	No	30		
1.1.23		(d) Corded Earplugs	No	0		
1.1.24		(e) Dust masks FFP2	No	200		
1.1.25		(g) Gloves	No	50		
1.1.26		(h) Goggles	No	50		
CARRIED FORWARD						

SECTION 1 : SABS 1200 A - GENERAL

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
	CR 7(1)(g);	iv) Cost of medical certificates and medical surveillance				
1.1.27	PSHSS 7.2	(a) Initial (baseline) medical examinations	No	30		
1.1.28		(b) Exit medical examinations	No	30		
	PSHSS 7.14	v) Fall Protection				
1.1.29		a) Lifeline & anchorage	No	2		
1.1.30		b) Safety Harnesses	No	5		
1.1.31		c) Rescue Kit	No	1		
		vi) Occupational Hygiene Survey				
1.1.32	NIHL 6; PSHSS 7.3	(a) Establishment of noise zones (plant)	Sum	1		
1.1.33		(b) Compliance with Amendment of the Occupational Exposure Control Limit for Silica in Table 1 of the Hazardous Chemical Substances including air sampling and analysis	Sum	1		
1.1.34	PSA 8.4.7	Compliance with EMP and EMPr	Sum	1		
1.2	8.4	TIME-RELATED ITEMS				
1.2.1	8.4.1	Contractual Requirements		1		
	8.4.2	Operation and Maintenance of Facilities on Site, for Duration of Construction, except where otherwise stated				
	8.4.2.1	Facilities for Engineer				
1.2.2		a) Furnished offices (1No.)		1		
1.2.3	PSAB 8.4.1	b) Telephone	Sum	1		
1.2.4		c) Nameboards (2 No.)	Sum	1		
1.2.5		d) Survey assistants and materials	Sum	1		
	8.4.2.2	Facilities for Contractor				
1.2.6		a) Offices and storage sheds	Sum	1		
1.2.7		b) Workshops	Sum	1		
1.2.8		c) Laboratories	Sum	1		
1.2.9		d) Living accommodation	Sum	1		
1.2.10		e) Ablution and latrine facilities	Sum	1		
1.2.11		f) Tools and equipment	Sum	1		
1.2.12		g) Water supplies, electric power and communications	Sum	1		
1.2.13		h) Dealing with water (see 5.5)	Sum	1		
1.2.14		i) Access (see 5.8)	Sum	1		
1.2.15		j) Plant	Sum	1		
1.2.16	8.4.3	Supervision for duration of Construction	Sum	1		
CARRIED FORWARD						

SECTION 1 : SABS 1200 A - GENERAL

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
1.2.17	8.4.5	Other Time-related Obligations	Sum	1		
	PSA 8.4.6	Compliance with the OHS Act (1993, as amended), the Construction Regulations (2014) and the Particular Safety Specification:				
1.2.18	CR 5(1)(g)	i) Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	month	12		
1.2.19	CR 8(5); PSHSS 6.1.5	ii) Provision of a full- time SACPCMP registered Construction Health and Safety Officer	month	12		
1.2.20		iii) Provision of a part-time assistant SACPCMP Candidate Construction Health and Safety Officer for Subcontractor Management & Assistance	month	12		
		iv) OH&S Legal Compliance Training - SAQA UNIT STANDARD				
1.2.21	GSR 3(5); PSHSS 7.5	a) First Aid	No	1		
1.2.22	PSHSS 6.1.7	b) H&S Representative	No	1		
1.2.23	PSHSS 7.14	c) Working at height & rescue operations	No	20		
1.2.24	CR 29(h)	d) Basic Fire Fighting	No	1		
1.2.25	PSHSS 6.1.3/4	e) Safety for Supervisors	No	2		
1.2.26	PSHSS 7.13	f) Temporary Works Training	No	20		
1.2.27	SANS 10085; PSHSS 7.13	g) Scaffolding	No	5		
1.2.28	PSHSS 7.10	h) Plant Operators	No	5		
1.2.29	PSHSS 6.1.6	i) Temporary Roadworks Signage	Sum	1		
1.2.30	PSHSS 7.17	j) Excavation Safety - Supervisors	No	12		
1.2.31		k) Other	Sum	1		
1.2.32	GSR 3; PSHSS 7.5	v) Provision of First Aid Boxes to GSR requirements	No	3		
1.2.33	GMR 18; PSHSS 7.13	vi) Lifting Equipment Inspection by AIA	Sum	1		
1.2.34	PSHSS 7.13	vii) Temporary Works Designs, Inspections and Approval	Sum	1		
1.2.35	CR 7(1)(c) (e)	viii) Submission of a Health and Safety File	Sum	1		
1.2.36	PSA 8.4.7	Compliance with EMP and EMPr	Sum	1		
1.2.37	PSA 8.4.8	Supervision of Subcontractor	Sum	1		
CARRIED FORWARD						

SECTION 1 : SABS 1200 A - GENERAL

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
1.3	8.5	BROUGHT FORWARD SUMS STATED PROVISIONALLY BY ENGINEER (Subclause 8.1.2.1 (d))				
1.3.1		Community Liason Officer	Prov. Sum	1	60 000.00	60 000.00
1.3.2		Overheads, charges and profit on 1.3.1 above	%	60000		
1.3.3		Additional Tests required by Engineer	Prov. Sum	1	150 000.00	150 000.00
1.3.4		Overheads, charges and profit on 1.3.3 above	%	150000		
1.3.5		Allowance for additional survey	Prov. Sum	1	120 000.00	120 000.00
1.3.6		Overheads, charges and profit on 1.3.5 above	%	120000		
1.3.7		Allowance for relocation of existing services	Prov. Sum	1	100 000.00	100 000.00
1.3.8		Overheads, charges and profit on 1.3.7 above	%	100000		
1.3.9		Allowance for connections to existing infrastructure	Prov. Sum	1	50 000.00	50 000.00
1.3.10		Overheads, charges and profit on 1.3.9 above	%	50000		
1.3.11		Allowance for River Crossings	Prov. Sum	1	150 000.00	150 000.00
1.3.12		Overheads, charges and profit on 1.3.11 above	%	150000		
1.3.13		Allowance for lightning protection at Reservoir	Prov. Sum	1	50 000.00	50 000.00
1.3.14		Overheads, charges and profit on 1.3.13 above	%	50000		
1.3.15		Allowance for HIV awareness and training	Prov. Sum	1	10 000.00	10 000.00
1.3.16		Overheads, charges and profit on 1.3.15 above	%	10000		
		Expanded Public Works Programme (EPWP)				
1.3.17		Allowance for training on targeted labour	Prov. Sum	1	100 000.00	100 000.00
1.3.18		Overheads, charges and profit on 1.3.17 above	%	100000		
1.3.19		Transportation and accomodation of workers for training where it is not possible to undertake in close proximity	Prov. Sum	1	10 000.00	10 000.00
1.3.20		Overheads, charges and profit on 1.3.19 above	%	10000		
CARRIED FORWARD						

SECTION 1 : SABS 1200 A - GENERAL

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
1.3.21		BROUGHT FORWARD Allowance for the supply of safety apparel (safety boots, reflectors, vests, orange overalls bearing the EPWP logo and large EPWP logo on the back and safety gloves for all targeted labour)	Prov. Sum	1	20 000.00	20 000.00
1.3.22		Overheads, charges and profit on 1.3.21 above	%	20000		
1.3.23		Equipment for the Engineer	Prov. Sum	1	125 000.00	125 000.00
1.3.24		Overheads, Charges and Profit on item 1.3.23 above	%	125000		
1.3.25		Allowance for Civil Engineering Student / Trainee	Prov. Sum	1	96 000.00	96 000.00
1.3.26		Overheads, Charges and Profit on item 1.3.25 above	%	96000		
1.3.27		Training of SMME Contractors	Prov. Sum	1	200 000.00	200 000.00
1.3.28		Overheads, Charges and Profit on item 1.3.27 above	%	200000		
1.3.29		Transportation for the Engineer for the duration of the contract (R30000 pm).	Prov. Sum	1	360 000.00	360 000.00
1.3.30		Overheads, Charges and Profit on item 1.3.29 above	%	360000		
1.3.31		Cellphone allowance for the Engineer for the duration of the contract (R5000 pm).	Prov. Sum	1	60 000.00	60 000.00
1.3.32		Overheads, Charges and Profit on item 1.3.31 above	%	60000		
	PSA 8.7	DAYWORK (See 8.1.2.1 (d))				
1.3.33		a) Labour	Prov. Sum	1	100 000.00	100 000.00
1.3.34		Overheads, charges and profit on item 1.3.33 above	%	100000		
1.3.35		b) Materials	Prov. Sum	1	100 000.00	100 000.00
1.3.36		Overheads, charges and profit on item 1.3.35 above	%	100000		
1.3.37		c) Plant	Prov. Sum	1	100 000.00	100 000.00
1.3.38		Overheads, charges and profit on item 1.3.38 above	%	100000		
1.4	8.8	TEMPORARY WORKS (See 8.1.2.1 (d))				
1.4.1	8.8.1	Main Access Road to Works (construct and maintain)	Sum	1		
1.4.2	PSA 8.8.2	Dealing with traffic	Sum	1		
1.4.3	PSA 8.8.7	Contractor to provide "Construction Record" Information	Sum	1		
TOTAL FOR SECTION 1 CARRIED FORWARD TO SUMMARY						

SECTION 2 : SABS 1200 C - SITE CLEARANCE (PIPE ROUTE)

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
2.1	8.2.1	Clear and grub (i) Pipeline route (10m wide strip)	m	7995		
2.2	8.2.2	Remove and grub large trees and tree stumps of girth a) over 1 m and up to 2 m	No.	5		
2.3		b) over 2 m and up to 3 m	No.	5		
2.4	8.2.3	Remove and grub all trees and tree stumps regardless of girth	ha	0.25		
2.5	8.2.4	Reclear surfaces (only on instructions from Engineer)	m	200		
2.6	PSC 8.2.5	Take down existing fences	km	1		
	8.2.6	Clear hedge or fence or both where not scheduled separately				
2.7		(i) Hedges up to 2m high	m	100		
2.8		(ii) Reinstate Hedge	m	100		
TOTAL FOR SECTION 2 CARRIED FORWARD TO SUMMARY						

SECTION 3 : SABS 1200 D - EARTHWORKS (PIPE ROUTE)

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	8.3.8	Existing Services				
3.1	8.3.8.1	Location c) Excavate by hand in soft material to expose water / telkom / electrical service (LI)	m³	100		
3.2	8.3.10	Topsoiling (i) Pipeline Route	m²	39975		
3.3	8.3.11	Grassing or Vegetation Cover (i) Pipeline Route	m²	39975		
3.4	PSD 8.3.13	Erosion Control Berms	m²	100		
3.5	PSD 8.3.14	Sandbag Protection to pipe trench	No.	100		
3.6	PSD 8.3.15	Extra-over Sandbag Protection for Stabilization	No.	100		
TOTAL FOR SECTION 3 CARRIED FORWARD TO SUMMARY						

SECTION 4 : SABS 1200 DB - PIPE TRENCHES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
4.1	8.3.1 PSDB 8.3.1.C	Site Clearance and (if specified) Removal of Topsoil c) Remove Topsoil (i) 150mm (up to 5m wide strip)	m ²	39975		
4.2	8.3.2	Excavation a) Excavate in all materials for trenches, backfill, compact, and dispose of surplus material For pipes: Up to and including 400mm diam. for total trench depth:				
		Over 1m and up to 2m	m	7883		
4.3		Over 2m and up to 3m	m	120		
4.4		b) Extra-over item (a) above for: 2) Hard rock excavation	m ³	400		
4.5		3) Hard rock excavation near residential buildings (Mounted hydraulic breaker where directed by the Engineer)	m ³	100		
4.6		c) Excavate and dispose of unsuitable material from trench bottom (provisional)	m ³	480		
4.7	8.3.2(b)	Excavate and dispose of unsuitable material from trench bottom within a 1km radius freehaul (Provisional)	m ³	120		
	8.3.3	Excavation Ancillaries				
	8.3.3.1	Make up deficiency in backfill material (provisional)				
4.8		a) from other necessary excavations on site	m ³	360		
4.9		c) by importation from commercial or off site sources selected by the Contractor	m ³	360		
4.10	PSDB 8.3.3.1	d) stabilised backfill	m ³	100		
4.11	PSDB 8.3.3.4	Overhaul				
4.12		a) Limited Overhaul (provisional)	m ³	500		
4.13		b) Long Overhaul (provisional)	m ³ .km	500		
	8.3.4	Particular Items				
		a) Shore trench opposite structure or service				
4.14		(i) Existing houses and toilet structures	m	100		
	8.3.5	Existing Services that Intersect or Adjoin a Pipe Trench				
		a) Services that intersect a trench				
4.15		i) Concrete pipe up to 1000 mm dia.	No.	5		
CARRIED FORWARD						

SECTION 4 : SABS 1200 DB - PIPE TRENCHES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
4.16		ii) Water pipe up to 400 mm dia.	No.	7		
4.17		iii) Electrical Cables	No.	7		
		b) Services that adjoin a trench				
4.18		i) Water pipe up to 400 mm dia.	m	100		
4.19		ii) Telkom Cables	m	10		
4.20		ii) Electrical Cables	m	20		
	8.3.6	Finishing				
	8.3.6.1	Reinstate road surfaces complete with all courses				
4.21		a) Gravel on shoulders and wearing course	m ²	40		
TOTAL FOR SECTION 4 CARRIED FORWARD TO SUMMARY						

SECTION 5 : SABS 1200 DK - GABIONS AND PITCHING

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
5.1	8.2.1	Surface preparation for bedding of gabions a) Cavities filled with approved excavated or rock (LI)	m ²	20		
5.2		b) Cavities filled with grade 15 concrete (provisional)	m ²	10		
5.3	8.2.2	Gabions Gabions (PVC Coated) 1.0 m x 1.0 m x 1.0 m	m ³	4		
5.4		1.0 m x 1.0 m x 4.0 m				
5.5		Foundation Mattresses (PVC Coated) 0.23 m x 2.0 m x 6.0 m	m ³	6		
5.6	8.2.3	Extra-over item 8.2.2 for packing selected stone for exposed face	m ²	20		
5.7	8.2.4	Geotextile (or geomembrane) - Type A2 (i) For gabions	m ²	60		
5.8		(ii) For crushed stone bedding and sub-soil drains	m ²	10		
5.9	8.2.5	Pitching Grouted stone pitching	m ²	15		
TOTAL FOR SECTION 5 CARRIED FORWARD TO SUMMARY						

SECTION 6 : SABS 1200 L - MEDIUM-PRESSURE PIPELINES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
6.1	8.2.1	Supply, Lay and Bed Pipes Complete with Couplings 315 Diameter Pipes (i) 315mm diam. mPVC CL16 to SABS 966-2	m	6290		
6.2		110 Diameter Pipes (ii) 110mm diam. mPVC CL16 to SABS 966-2	m	885		
6.3		50 Diameter Pipes (iii) 50 mm diam HDPE CL 12 to SABS 533	m	810		
6.4	8.2.2	Extra-over 8.2.1 for the Supplying, Laying and Bedding of Specials Complete with Couplings mPVC Double Socketed Bends CL16 110 Diameter Pipe Bends (i) 110 mm Ø 11¼° bend	No.	4		
6.5		(ii) 110 mm Ø 22½° bend	No.	3		
6.6		(iii) 110 mm Ø 45° bend	No.	3		
6.7		315 Diameter Pipe Bends (i) 315 mm Ø 11¼° bend	No.	8		
6.8		(ii) 315 mm Ø 22½° bend	No.	2		
6.9		(iii) 315 mm Ø 45° bend	No.	1		
6.10		Fittings CL16 (i) 315 x 200 Ø reducer	No.	1		
6.11		(ii) 315 x 110 Ø Reducing Tee	No.	1		
6.12		(iii) 315 x 160 Ø Reducing Tee	No.	1		
6.13	8.2.3	Extra-over 8.2.1 for the Supplying, Fixing, and Bedding of Valves Isolating Valve assembly complete as per detail on drawing no. ZCE063/FT/WA/C1-304 i) 315 mm Ø ND, PN16	No.	5		
6.14		ii) 110 mm Ø ND, PN16	No.	1		
6.15		Scour Valve assembly complete as per detail on drawing no. ZCE063/FT/WA/C1-307 (i) 80 mm Ø ND off 110 mm Ø OD mPVC pipe, PN 16	No.	1		
6.16		(ii) 100 mm Ø ND off 315 mm Ø OD mPVC pipe, PN 16 Air Valve assembly complete as per detail on drawing no. ZCE063/FT/WA/C1-306	No.	6		
CARRIED FORWARD						

SECTION 6 : SABS 1200 L - MEDIUM-PRESSURE PIPELINES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
6.17		BROUGHT FORWARD (i) 25 mm Ø ND off 110 mm Ø OD mPVC pipe, PN 16	No.	2		
6.18		(ii) 50 mm Ø ND off 300 mm Ø OD mPVC pipe, PN 16	No.	9		
6.19		Off-Take chamber assembly complete as per drawing no. ZCE063/FT/WA/C1-311	No.	2		
	8.2.11	Anchor / Thrust Blocks and Pedestals as per drawing no. ZCE063/FT/WA/C1-301				
6.20		a) Dimensions stated on Drawing mentioned above	Sum	1		
	8.2.13	Valves and Hydrant Chambers etc				
6.21		Isolating Valve Chamber complete as per detail on drawing no. ZCE063/FT/WA/C1-304	No.	6		
6.22		Scour Valve Chambers complete as per detail on drawing no. ZCE063/FT/WA/C1-307	No.	7		
6.23		Air Valve Chambers complete as per detail on drawing no. ZCE063/FT/WA/C1-306	No.	11		
6.24	PSL 8.2.18	Off-Take chamber complete as per drawing no. ZCE063/FT/WA/C1-311	No.	3		
6.25	PSL 8.2.16	Supply and install pipeline markers as per detail on drawing no. ZCE063/FT/WA/C1-303	No.	144		
6.26	PSL 8.2.17	Supply and install valve markers as per detail on drawing no. ZCE063/FT/WA/C1-303	No.	23		
		Sundry Items				
		Supply, lay, bed and install concrete pipe sleeves for road crossings, inclusive of all items (viz. skids etc) necessary for pipe support through sleeve as per drawing No... Class 100D, Spigot and Socket type as per drawing no. ZCE063/FT/WA/C1-309 for:				
6.27		(i) 600 mm ND Concrete Sleeve for 400 mm ND mPVC pipe	m	10		
6.28		(ii) 600 mm ND Concrete Sleeve for 215 mm ND mPVC pipe	m	10		
6.29		(iii) 600 mm ND Concrete Sleeve for 200 mm ND mPVC pipe	m	10		
6.30	PSL 8.2.18	Tie in to existing pipelines, chambers & reservoirs	Sum	1		
TOTAL FOR SECTION 6 CARRIED FORWARD TO SUMMARY						

SECTION 7 : SABS 1200 LB - BEDDING: (PIPES)

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
	8.2.1	Supply only of Bedding from Trench Excavation within 0.5km				
7.1		a) Selected granular material	m ³	878		
7.2		b) Selected fill material	m ³	353		
	8.2.2	Supply only of Bedding by Importation				
	8.2.2.3	From commercial sources (Provisional)				
7.3		a) Selected granular material	m ³	2083		
7.4		b) Selected fill material	m ³	913		
7.5		c) 19mm graded crushed stone	m ³	5		
7.6	8.2.3	Concrete Bedding Cradle	m ³	10		
	8.2.4	Encasing of Pipes in Concrete				
7.7		(i) Grade 25 MPa / 19 mm concrete	m ³	15		
7.8	8.2.5	Overhaul of Material for Bedding Cradle and Selected Fill Blanket	m ³ .km	3000		
TOTAL FOR SECTION 7 CARRIED FORWARD TO SUMMARY						

SECTION 8 : SUBCONTRACTOR'S SCOPE

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
8.1	C3.3.2.1	Scope of mandatory subcontract works	Sum	1	8 530 500.00	8 530 500.00
TOTAL FOR SECTION 8 CARRIED FORWARD TO SUMMARY						

SUMMARY OF BILL OF QUANTITIES

		AMOUNT
SECTION 1	SABS 1200 A - GENERAL	
SECTION 2	SABS 1200 C - SITE CLEARANCE	
SECTION 3	SABS 1200 D - EARTHWORKS	
SECTION 4	SABS 1200 DB - PIPE TRENCHES	
SECTION 5	SABS 1200 DK – GABIONS AND PITCHING	
SECTION 6	SABS 1200 L - MEDIUM-PRESSURE PIPELINES	
SECTION 7	SABS 1200 LB - BEDDING: (PIPES)	
SECTION 8	SUBCONTRACTOR'S SCOPE	

NETT TOTAL OF TENDER

ALLOWANCE FOR CONTINGENCIES (10% OF SUBTOTAL)
 (to be spend as the Engineering may direct and to be deducted in whole
 or in part it not required)

TOTAL INCLUDING CONTINGENCIES

ALLOWANCE FOR CONTRACT PRICE ADJUSTMENT (6%)

TOTAL INCLUDING CONTRACT PRICE ADJUSTMENT

ALLOWANCE FOR VAT 15%

GROSS TOTAL CARRIED TO PART C1.1 FORM OF OFFER & ACCEPTANCE

TIME FOR COMPLETION OF CONTRACT (not to exceed 52 weeks) weeks

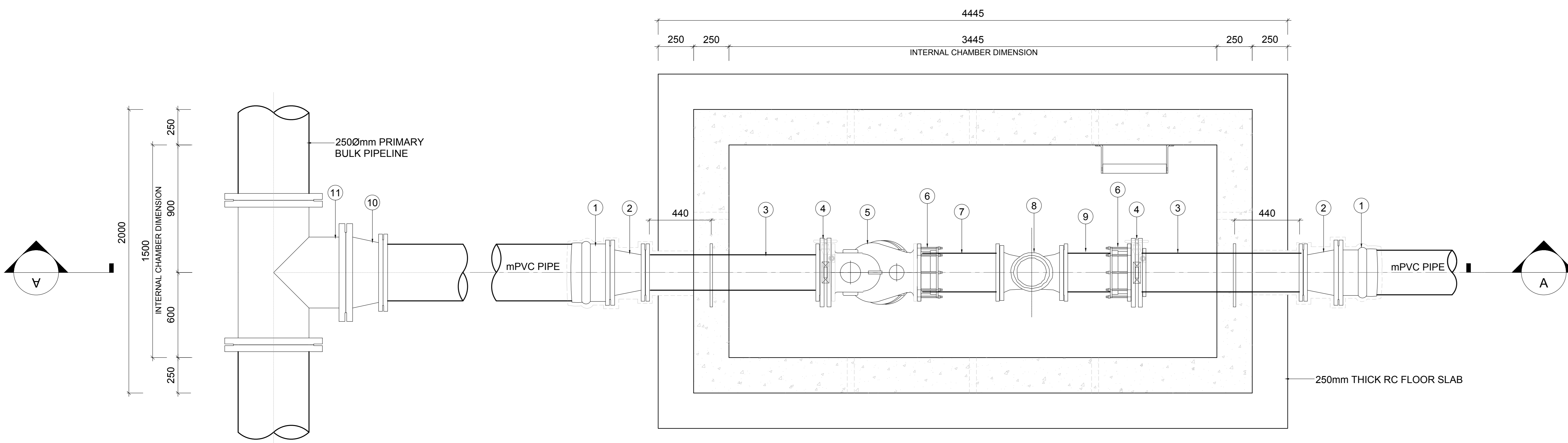
SIGNED BY/ON BEHALF OF TENDERER

NAME

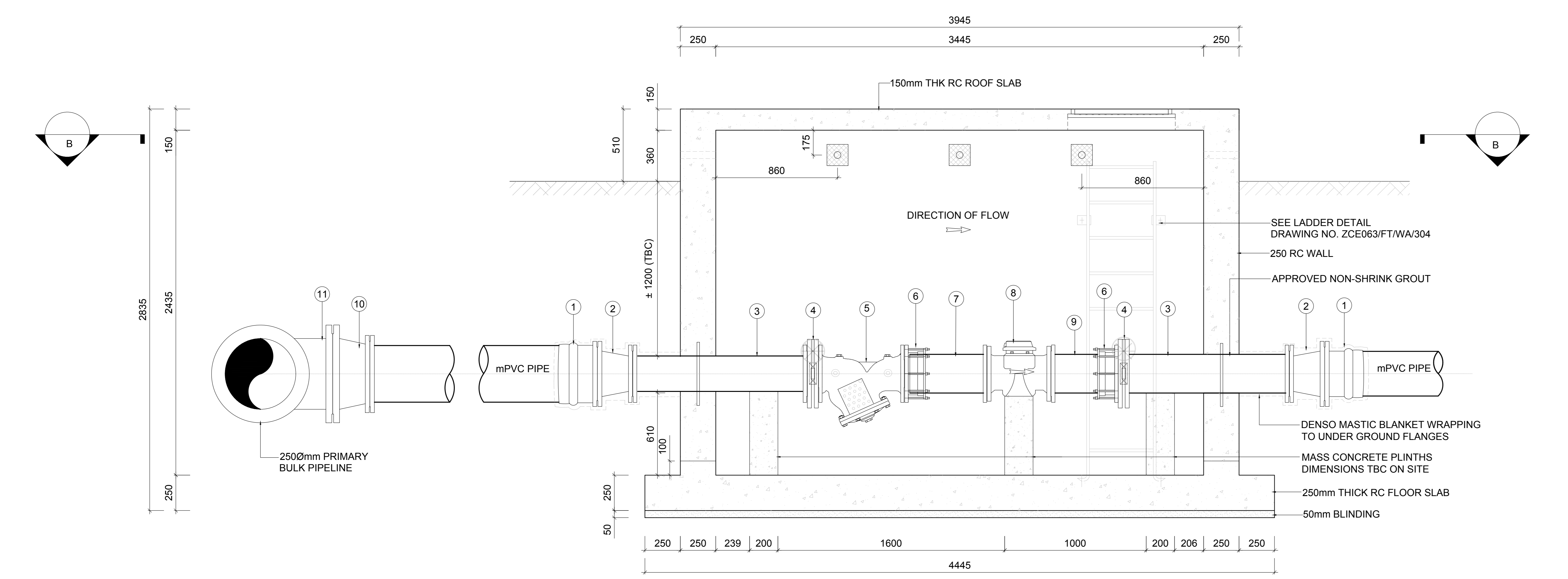
SIGNATURE

DATE

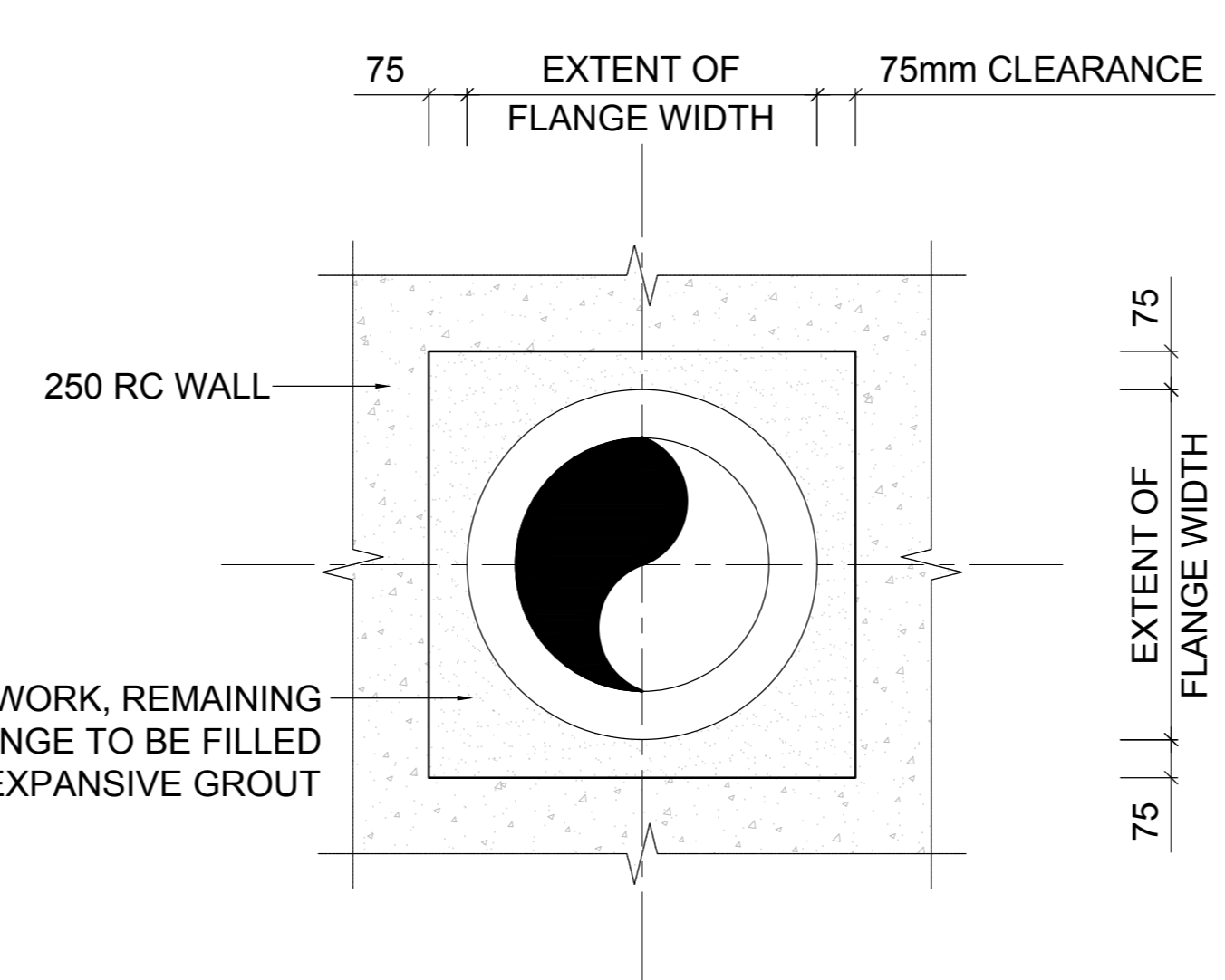
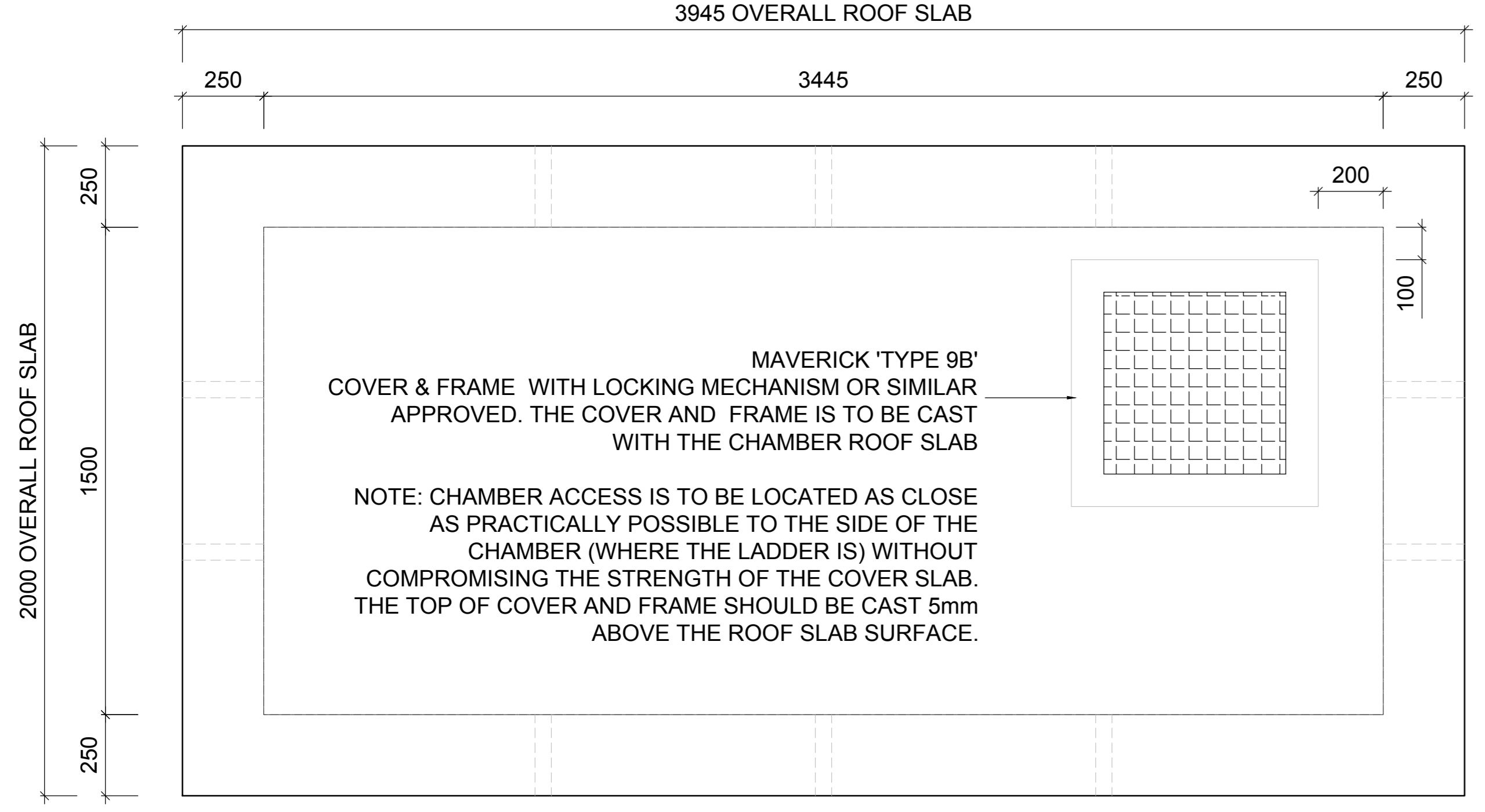
COMPANY STAMP



SECTION "B-B"



SECTION "A-A"
SCALE 1:20



TYPICAL BOX OUT DETAIL
SCALE 1:20

NOTE:
ASSUME 0.1 TONS STEEL PER m³ OF CONCRETE

ABRV.	DESCRIPTION	SKETCH
F.A.E.	FLANGED ONE END	
F.B.E.	FLANGED BOTH ENDS	
F.A.E.	FLANGED ALL ENDS	

75mm Ø uPVC SCHEDULE TABLE

ITEM	NOMINAL DIAMETER	QTY	DESCRIPTION	SKETCH	PN
①	75	2	CI FLANGE ADAPTOR		16
②	75 X 50	2	GMS FLANGED REDUCER		16
③	50	2	GMS PIPE, F.B.E. 1290mm LONG WITH PUDDLE FLANGE 410mm FROM ONE END.		16
④	50	2	FLANGED AMRI BUTTERFLY VALVE, OR SIMILAR APPROVED, ±56mm WIDTH		16
⑤	50	1	FLANGED BERHAD STRAINER OR SIMILAR APPROVED, ±415mm FLANGE TO FLANGE		16
⑥	50	2	VJ FLANGE ADAPTOR, OR SIMILAR APPROVED		16
⑦	50	1	GMS PIPE, 830mm LONG, F.O.E		16
⑧	50	1	FLANGED SENSUS WATER METER OR SIMILAR APPROVED, ±300mm LONG		16
⑨	50	1	GMS PIPE, 520mm LONG, F.O.E		16
⑩	500 X 400	1	GMS FLANGED REDUCER		16
⑪	500 X 500	1	GMS EQUAL TEE, F.A.E		16

110mm Ø uPVC SCHEDULE TABLE

ITEM	NOMINAL DIAMETER	QTY	DESCRIPTION	SKETCH	PN
①	110	2	CI FLANGE ADAPTOR		16
②	110 X 90	2	GMS FLANGED REDUCER		16
③	90	2	GMS PIPE, F.B.E. 1290mm LONG WITH PUDDLE FLANGE 410mm FROM ONE END.		16
④	90	2	FLANGED AMRI BUTTERFLY VALVE, OR SIMILAR APPROVED, ±56mm WIDTH		16
⑤	90	1	FLANGED BERHAD STRAINER OR SIMILAR APPROVED, ±415mm FLANGE TO FLANGE		16
⑥	90	2	VJ FLANGE ADAPTOR, OR SIMILAR APPROVED		16
⑦	90	1	GMS PIPE, 830mm LONG, F.O.E		16
⑧	90	1	FLANGED SENSUS WATER METER OR SIMILAR APPROVED, ±300mm LONG		16
⑨	90	1	GMS PIPE, 520mm LONG, F.O.E		16
⑩	500 X 400	1	GMS FLANGED REDUCER		16
⑪	500 X 500	1	GMS EQUAL TEE, F.A.E		16

CHAMBER NOTES:

- ALL WORK IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200.
- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- ALL PIPE FITTINGS TO BE CHECKED ON SITE. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO MANUFACTURE.
- ALL PIPEWORK TO BE GMS UNLESS STATED OTHERWISE.
- ALL FLANGES SHALL BE RATED AND DRILLED TO SABS 1123.
- ALL BOLTS TO BE HOT-DIPPED GALVANISED
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT CIVIL MECHANICAL DRAWINGS.
- ALL BURIED FLANGES AND FITTINGS TO BE WRAPPED IN "DENSO MASTIC" BLANKET WRAPPING.
- ALL CONCRETE IS TO BE GRADE 25/19 UNLESS STATED OTHERWISE

CONCRETE NOTES:

- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- FOUNDATION EXCAVATIONS TO BE APPROVED BY THE STRUCTURAL / GEOTECHNICAL ENGINEER.
- REINFORCING TO BE CHECKED BY THE ENGINEER.
- CONCRETE STRENGTHS @ 28 DAYS:
BLINDING : 15 MPa
BASES : 25 MPa
SLABS : 30 MPa
WALLS : 25 MPa
- COVER TO STEEL REINFORCING:
CHAMBER : 40mm
- ALL SHARP EXPOSED EDGES TO BE CHAMFERED 20 x 20mm.

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 Southernwood
 Midrand
 5099
 e-mail: wjnom@ziinzame.co.za
 Tel (047) 531 0269
 Fax (047) 531 0269

TENDER DRAWING
 DATE : 03-11-2020
 SIGNED BY : _____
 CONSULTING ENGINEER

REV	DATE	DESCRIPTION	BY	CHK

DRG. NO. REFERENCE DRAWINGS



CLIENT NAME
O.R. TAMBO DISTRICT MUNICIPALITY

PROJECT TITLE
MQANDULI SECONDARY BULK WATER SUPPLY PHASE 2

CONTRACT 1

DRAWING TITLE
OFF-TAKE CHAMBER DETAILS

	RESPONSIBLE PERSON	DATE
DESIGNED	M.NDABANKULU	03-11-2020
CHECKED	V.MWAFUKA	03-11-2020
DRAWN	D.GENGAN	03-11-2020
CHECKED	V. MWAFUKA	03-11-2020
SCALES	AS SHOWN	SHEET SIZE A0
DRAWING NO.	ZCE 063/FT/WA/C1	
	REVISION	
	1	