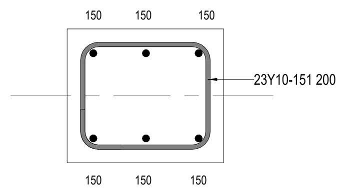
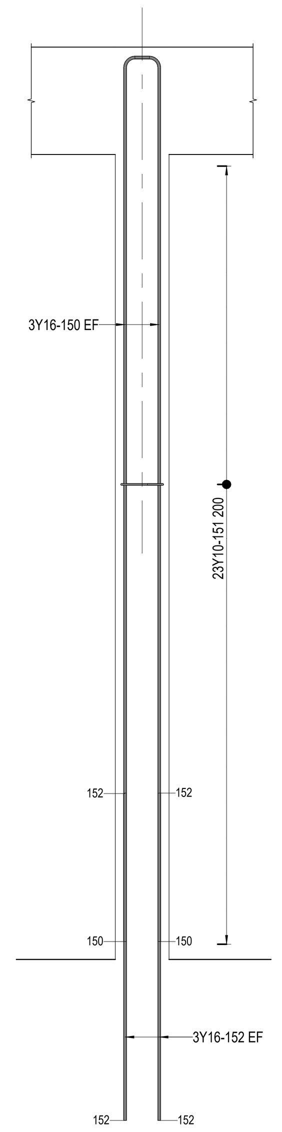


COLUMN - REINFORCEMENT

SCALE 1 : 10



COLUMN - SECTION

SCALE 1 : 25

Type	Mark	No of Mbrs	No of Bars	Total	Length	Shape	A	B	C	D	E
01. TRENCH											
Y12	01	2	24	48	1750	60	150	700			
Y12	02	2	48	96	1850	60	150	750			
Y12	03	2	22	44	4950	35	4810				
Y12	04	2	2	4	1850	60	750	150			
Y12	05	2	6	12	850	35	700				
02. PLINTH											
Y16	10	2	13	26	3600	60	850	900			
Y16	11	2	5	10	4650	53	400	820	2370	820	400
Y16	12	2	6	12	3800	38	740	2400	740		
03. FLOOR SLAB											
Y20	20	1	78	78	10250	35	9980				
Y20	21	1	159	159	1950	34	1800				
Y20	22	1	23	23	5500	35	5240				
Y16	23	1	23	23	5450	35	5240				
Y16	24	1	78	78	8600	20	8580				
Y20	25	1	23	23	5400	35	5120				
Y16	26	1	23	23	5350	35	5120				
Y20	27	1	23	23	5100	35	4840				
Y16	28	1	23	23	5050	35	4840				
Y20	29	1	29	29	11150	34	11000				
Y20	30	1	25	25	6350	34	6200				
Y20	31	1	4	4	5050	34	4900				
Y16	32	1	29	29	11100	34	11000				
Y16	33	1	25	25	5900	34	5800				
Y16	34	1	4	4	4800	34	4700				
Y16	35	1	4	4	1700	60	210	600			
Y16	36	1	7	7	3000	60	250	1200			
Y16	37	1	14	14	1450	35	1220				
Y20	38	1	4	4	5250	35	4970				
Y16	39	1	4	4	5200	35	4970				
Y20	40	1	227	227	3000	38	1450	220	1450		
Y20	41	1	223	223	2650	37	1450	1230	0	0	0
Y20	42	1	6	6	3150	37	1950	1230	0	0	0
Y20	43	1	6	6	4000	38	1950	220	1950		
Y16	44	1	13	13	1800	60	250	600			
Y20	45	1	3	3	8950	35	8680				
Y16	46	1	3	3	8900	35	8680				
Y20	47	1	11	11	3700	38	1800	220	1800		
Y20	48	1	9	9	2850	37	1800	1100	0	0	0
Y16	49	1	7	7	1800	60	270	600			
Y10	50	145	1	145	1350	83	350	190	350	350	
04. WALLS											
Y20	60	1	488	488	4950	34	4800				
Y16	61	1	98	98	10250	37	9850	450	0	0	0
Y16	62	1	98	98	6750	37	6350	450	0	0	0
Y16	63	1	100	100	10100	38	450	9280	450		
Y10	64	1	220	220	400	35	250				
Y16	65	1	92	92	1950	37	1000	1000	0	0	0
05. WALKWAY/PLATFORM											
Y10	75	1	156	156	1150	60	400	150			
Y12	76	1	90	90	2900	38	1400	150	1400		

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DATE:
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Type	Mark	No of Mbrs	No of Bars	Total	Length	Shape	A	B	C	D	E
Y16	77	1	425	425	2100	37	950	1180	0	0	0
Y12	78	1	32	32	8600	20	8580				
Y12	79	1	22	22	9600	20	9600				
Y12	80	1	22	22	5600	20	5600				
Y12	81	1	60	60	3900	38	1900	150	1900		
Y12	82	1	18	18	6550	34	6450				
Y12	83	1	4	4	5700	54	300	5170	300	0	0
Y12	84	1	4	4	6100	38	300	5550	300		
Y12	85	1	4	4	4600	37	300	4340	0	0	0
Y12	86	1	4	4	8600	37	300	8340	0	0	0
Y12	87	1	4	4	2250	54	300	1740	300	0	0
Y10	88	1	20	20	1250	60	200	400			
Y12	89	1	8	8	2950	38	400	2240	400		
Y12	90	1	4	4	7700	38	300	7170	300		
Y10	91	50	1	50	1200	83	350	110	350	350	
06. STAIRCASE											
Y12	100	1	8	8	1950	62	1380	690	1190	580	0
Y12	101	1	8	8	3450	62	570	290	490	2900	0
Y12	102	1	85	85	2150	38	120	1730	350		
Y12	103	1	14	14	2050	38	180	1750	200		
Y12	104	1	8	8	2250	38	150	1750	400		
Y12	105	1	8	8	1750	62	1180	590	1020	580	0
Y12	106	1	8	8	1450	62	570	290	490	880	0
Y12	107	1	16	16	1300	37	980	350	0	0	0
Y12	108	1	8	8	2300	62	1700	850	1470	600	0
Y12	109	1	8	8	2100	62	1500	760	1300	600	0
Y12	110	1	8	8	1350	62	410	200	350	960	0
Y12	111	1	8	8	2600	62	2090	1050	1800	500	0
Y12	112	1	8	8	2450	62	1960	990	1690	500	0
Y12	113	1	8	8	2400	99A	600	1700	120	0	0
Y12	114	1	8	8	5000	62	4520	2280	3900	510	0
Y12	115	1	8	8	1400	62	450	230	390	960	0
Y12	116	1	8	8	1350	62	830	420	720	510	0
Y12	117	1	8	8	2400	45	820	1500	0	420	710
07. COLUMNS											
Y16	150	8	6	48	5050	34	4950				
Y10	151	8	23	184	1100	60	240	290			
Y16	152	8	6	48	1850	20	1830				
08. BEAM 01											
Y10	170	4	44	176	1600	60	540	240			
Y20	171	4	3	12	12500	55	1020	510	9320	510	1360
Y20	172	4	2	8	9600	35	9320				
09. BEAM 02											
Y10	180	2	74	148	1600	60	540	240			
Y12	181	2	3	6	7150	38	600	510	6100		
Y12	182	2	3	6	11000	38	600	510	9940		
Y12	183	2	3	6	6150	34	6100				
Y12	184	2	3	6	10000	34	9940				

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AIR VALVE TYPE 1 REBAR SUMMARY

TYPE	TOTAL BAR LENGTH (m)	MASS (kg)
Y10	1275.1	809.45
Y12	2595.7	2318.13
Y16	5917.9	9384.16
Y20	6037.0	14956.09
TOTAL	15825.8	27467.83

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Rev.	Date	Description	Des.	Verif.	Appd.

VHEMBE DISTRICT MUNICIPALITY
PRIVATE BAG X 5006
THOHOYANDOU
LIMPOPO
0950
TEL: 015 960 2000

CONCEPTUAL ENGINEERS (Pty) Ltd
Rhodesdrift Office Park
23 Rhodesdrift Road, Bendor
Polokwane 0699
Tel:
Email:

Drawn: MR — Date
Checked: SN — Date
Designed: MR — Date
Verified: MR — Date
Approved: SN

Client: **VHEMBE DISTRICT MUNICIPALITY**

Project: **CONSULTANT FOR NANDONI RWS (CONSTRUCTION OF BULK WATER SUPPLY PIPELINE, STORAGE RESERVOIR, GRAVITY MAIN AND CONNECTION TO EXISTING SYSTEM AT MPHAMBO, MPHAMBO EXTENSION, XIGAMANE, AND MUSWANE VILLAGES)**

Title: **PHASE 1 MAVAMBE BULK PUMPING SYSTEM : POTABLE WATER PUMPSTATION REINFORCEMENT - SHEET 4 OF 4**

Status: INFORMATION / TENDER / CONSTRUCTION / AS-BUILT

Datum: AMSL | Date: | Scale: AS SHOWN | Size: A0

Revision

175-PH1-WPS- 307