


REINFORCEMENT BENDING SCHEDULE														
MEMBER	No OFF	No. PER UNIT	TOTAL OFF	DIA + MARK	CUTTING LENGTH	SHAPE CODE	A	B	C	D	E/R			
16	1	16	Y16 01	1775	38	100	1640	100	—	—	—			
14	1	14	Y16 02	3600	38	100	3470	100	—	—	—			
90	1	90	Y16 03	5650	38	100	5510	100	—	—	—			
80	1	74	Y16 04	9200	37	8860	360	—	—	—	—			
19	6	114	Y16 05	2700	38	360	2060	360	—	—	—			
1	6	6	Y16 06a	1725	37	1390	360	—	—	—	—			
1	6	6	Y16 06b	1375	37	1040	360	—	—	—	—			
1	6	6	Y16 06c	1025	37	695	360	—	—	—	—			
10	6	60	Y16 07a	925	20	915	—	—	—	—	—			
1	6	6	Y16 07b	1050	20	1030	—	—	—	—	—			
1	6	6	Y16 07c	1150	20	1145	—	—	—	—	—			
1	6	6	Y16 07d	1275	20	1260	—	—	—	—	—			
1	6	6	Y16 07e	1400	20	1380	—	—	—	—	—			
1	6	6	Y16 07f	1500	20	1495	—	—	—	—	—			
1	6	6	Y16 07g	1625	20	1610	—	—	—	—	—			
1	6	6	Y16 07h	1725	20	1725	—	—	—	—	—			
1	6	6	Y16 07i	1850	20	1840	—	—	—	—	—			
10	6	60	Y16 07j	1950	20	1950	—	—	—	—	—			
6	23	138	Y16 08	2000	38	360	1330	360	—	—	—			
2	33	66	Y12 09	2950	60	1240	160	—	—	—	—			
2	8	16	Y10 10	6375	20	6375	—	—	—	—	—			
2	37	74	Y12 11	1575	60	550	160	—	—	—	—			
2	8	16	Y10 12	7200	20	7200	—	—	—	—	—			
2	12	24	Y16 13	2475	37	1975	540	—	—	—	—			
380	1	380	R10 14	700	83	150	130	150	150	—	—			
7	2	14	Y10 16	600	20	610	—	—	—	—	—			
7	2	14	Y10 17	500	20	500	—	—	—	—	—			
BAR	6	8	10	12	14	16	20	22	25	32	40	TOTAL		
LENGTH (m)	MS	—	266	—	—	—	—	—	—	—	—	266		
MASS (kg)	MS	—	164	—	—	—	—	—	—	—	—	164		
LENGTH (m)	H.Y.S.	—	240	310	2178	—	—	—	—	—	—	2705		
MASS (kg)	H.Y.S.	—	148	275	3441	—	—	—	—	—	—	3864		

1. ALL REINFORCEMENT TO COMPLY WITH SANS 920 – 2005 EDITION 2.2
 2. ALL REINFORCEMENT TO BE BENT TO SANS 282 – 2004 EDITION 5.1
- NOTE: Y = HIGH YIELD STEEL BARS
R = MILD STEEL BARS

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1. REINFORCEMENT TO BE SECURELY WIRED AT ALL INTERSECTIONS.
 2. MINIMUM LAP LENGTH = 50 X BAR DIAMETER (OR as you using 45 x BAR D)
 3. MINIMUM MESH LAP LENGTH = 300mm.
 4. ANY MISTAKES OR DISCREPANCIES MUST BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING ANY SUCH WORK.
 5. CONCRETE COVER TO ALL STRUCTURAL REINFORCEMENT IS 50mm
 6. REINFORCEMENT SPECIFICATIONS IS AS FOLLOWS:
HOT ROLLED MILD STEEL PLAIN ROUND BARS ("Y" BARS) 250 MPa
HOT ROLLED HIGH-YIELD STEEL DEFORMED BARS ("Y" BARS) 450 MPa
 7. ALL REINFORCEMENT MUST BE INSPECTED BY THE ENGINEER BEFORE CONCRETE IS CAST. THE ENGINEER MUST BE GIVEN 48 HOURS NOTICE BEFORE SUCH AN INSPECTION IS REQUIRED. INSPECTION WILL ONLY BE CONDUCTED IF ALL STEEL IS PROPERLY FIRED, SPACER BLOCKS POSITIONED, FORMWORK CLEANED OUT AND REINFORCEMENT CHECKED BY THE CONTRACTOR. CONCRETE MAY ONLY BE POURED AFTER THE ENGINEER HAS SIGNED A REQUEST FOR CONCRETE APPROVAL FORM AS PROVIDED BY THE CONSULTING ENGINEERS.
 8. BENDING CODE FOR REINFORCEMENT IN ACCORDANCE WITH SABS 302. CONCRETE SPACERS TO BE PROVIDED IF SPACER BARS ARE NOT PRESCRIBED OR DETAILED.
 9. THE DESIGN ENGINEER WILL NOT BE HELD RESPONSIBLE FOR ANY WORK THAT DEVIATES FROM THE ENGINEERS DESIGN AND APPROVED DRAWINGS.
 10. ABBREVIATIONS (only list those you actually call off)
ST - STRAIGHT
ALT - ALTERNATIVE
A.B.R. - ALTERNATE BARS REVERSED
O.W. - ONE WAY
O.D. - OTHER DIRECTION
B.W. - BOTH WAYS
HOR. - HORIZONTAL
VERT. - VERTICAL
N.F. - NEAR FACE
FF. - FAR FACE
STG. - STAGGERED
Y - HIGH TENSILE STEEL
R - MILD STEEL
N.T.A. - NOT TO SCALE
C/C - CENTRE TO CENTRE
TOP FIRST LAYER T1
TOP SECOND ALYER T2
BOTTOM SECOND LAYER B2
BOTTOM FIRST LAYER B1

DRAWING SCHEDULE	
DRAWING No.	DESCRIPTION
ROMH-042-07-01	GENERAL ARRANGEMENT
ROMH-042-07-02	CONCRETE DETAIL
ROMH-042-07-03	REINFORCEMENT DETAIL
ROMH-042-07-10	DETAIL SHEET 1
ROMH-042-07-11	DETAIL SHEET 2
ROMH-042-07-12	DETAIL SHEET 3

FOR TENDER



MOGALAKWENA MUNICIPALITY

54 Relief Street
Mokopane
0801

CLIENT:

PRQJECT:

CONTRACT No. :

UPGRADING OF GRAVEL ROADS AND STORMWATER IN
MOORDKOPPIE CLUSTER AT MABUSELA AND MASOGE VILLAGES

DESIGN COORDINATOR APPROVAL:

SIGNATURE

DATE

PROJECT MANAGER APPROVAL:

SIGNATURE

DATE


CLIENT APPROVAL:

SIGNATURE

DATE

A	JUL. 2020	ISSUED FOR TENDER PURPOSE ONLY	SQ
REV	DATE	DESCRIPTION	DRAWN
REVISIONS			
REV No.	A	PROJECT No.	
DRAWN: S. QUZA	CHECKED: S. SITHOLE	DESIGNED: P. SEOPA	
SCALES: AS SHOWN	DATE: SEPTEMBER 2020		
DRAWING TITLE: REINFORCEMENT LAYOUT AND DETAIL MASOGE MAJOR CULVERT			
REV No.	A	DRAWING No.	ROMH-042-07- 10-03

CONSULTANTS:



ROMH

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