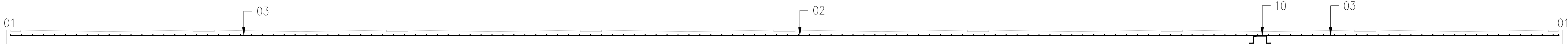


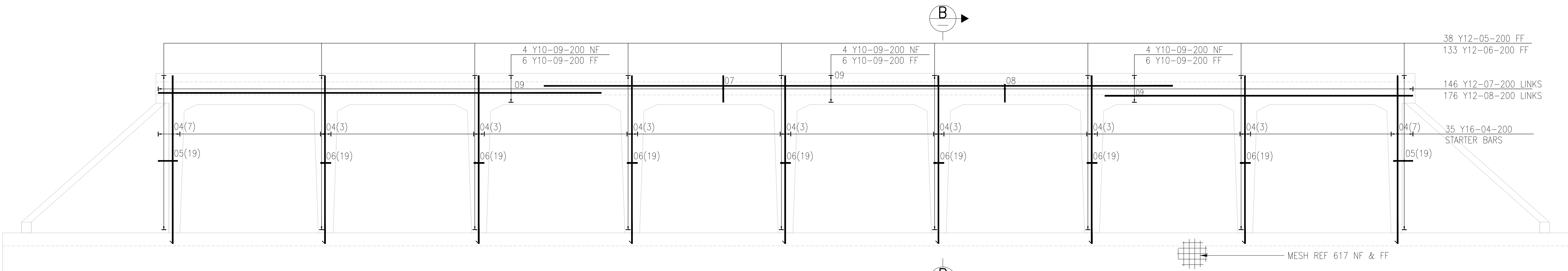
PLAN OF CULVERT SLAB & APRON SLAB

1:50



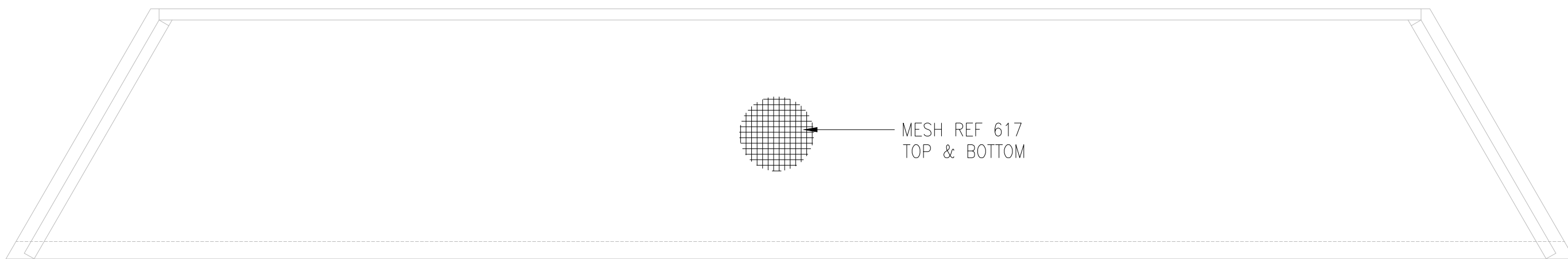
SECTION A-A

1:50



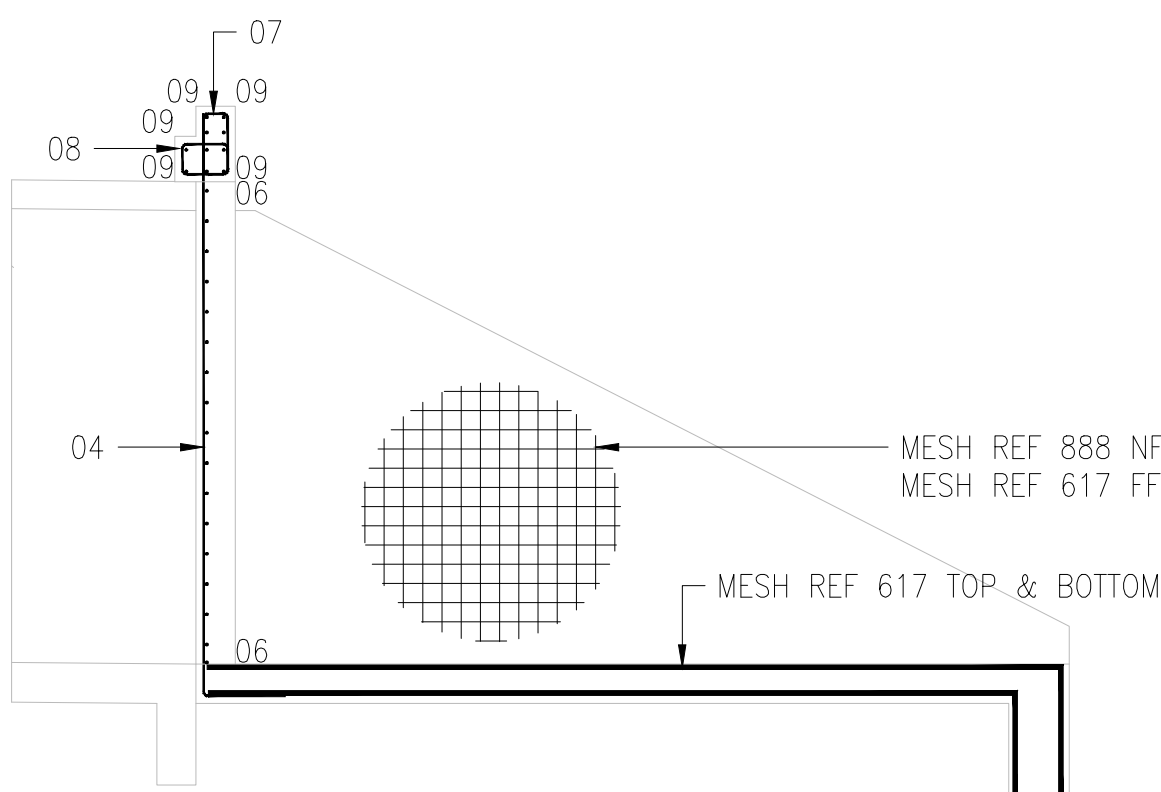
ELEVATION OF HEAD WALL

1:50



PLAN OF APRON SLAB

1:100



SECTION B-B

1:50

FOR TENDER

REINFORCEMENT BENDING SCHEDULE											
MEMBER	No OFF	No. OFF PER UNIT	TOTAL No. OFF	DA + MARK No.	CUTTING LENGTH	SHAPE CODE	A	B	C	D	E/R
-	286	1	286	Y16 01	7775	37	7700	100	-	-	-
74	1	74	Y16 02	10900	20	10900	-	-	-	-	-
148	1	148	Y16 03	9450	20	9450	-	-	-	-	-
35	2	70	Y16 04	4400	37	3890	540	-	-	-	-
38	2	76	Y12 05	450	20	450	-	-	-	-	-
133	2	266	Y12 06	250	20	250	-	-	-	-	-
146	2	292	Y12 07	1275	60	400	160	-	-	-	-
146	2	292	Y12 08	1150	60	300	200	-	-	-	-
30	2	60	Y10 09	10100	20	10100	-	-	-	-	-
1540	1	1540	R10 10	700	83	150	130	150	150	-	-
BAR:											
LENGTH (m) MS	6	8	10	12	14	16	20	22	25	32	40
MASS (kg) MS	326	-	-	-	-	-	-	-	-	-	-
LENGTH (m) H.Y.S	129	-	-	-	-	-	-	-	-	-	-
MASS (kg) H.Y.S	606	809	4737	-	-	-	-	-	-	-	-
MASS (kg) H.Y.S	379	718	7484	-	-	-	-	-	-	-	-

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

REINFORCING NOTES

1. REINFORCEMENT TO BE SECURELY WIRED AT ALL INTERSECTIONS.
2. MINIMUM LAP LENGTH = 50 X BAR DIAMETER (OR are you using AS 8 BAR 01)
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 FACED, 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 SANS 282. 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)

DRAWING SCHEDULE	
DRAWING No.	DESCRIPTION
ROMH-042-07-07	GENERAL ARRANGEMENT
ROMH-042-07-08	CONCRETE DETAIL
ROMH-042-07-09	REINFORCEMENT DETAIL
ROMH-042-07-10	DETAIL SHEET 1
ROMH-042-07-11	DETAIL SHEET 2
ROMH-042-07-12	DETAIL SHEET 3

CLIENT:



MOGALAKWENA MUNICIPALITY

54 Relief Street
Mokopane
0801

TEL: (015) 491 9600
FAX: (015) 491 9608

PROJECT:

CONTRACT No. :

UPGRADING OF GRAVEL ROADS AND STORMWATER IN
MOORDKOPPIE CLUSTER MOLEKANE VILLAGE

DESIGN COORDINATOR APPROVAL:

SIGNATURE _____ DATE _____

PROJECT MANAGER APPROVAL:

SIGNATURE _____ DATE _____

CLIENT APPROVAL:

SIGNATURE _____ DATE _____

A	JUL 2020	ISSUED FOR TENDER PURPOSE ONLY	SO
REV	DATE	DESCRIPTION	DRAWN

REVISIONS

DRAWN: S. QUZA	CHECKED: S. SITHOLE	DESIGNED: P. SEOPA
SCALES:	AS SHOWN	DATE: SEPTEMBER 2020
DRAWING TITLE:	REINFORCEMENT LAYOUT AND DETAIL MOLEKANE MAJOR CULVERT	
SIZE:	A0	PROJECT No.
REV No.	A	DRAWING No. ROMH-042-07- 10-09

CONSULTANTS:



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