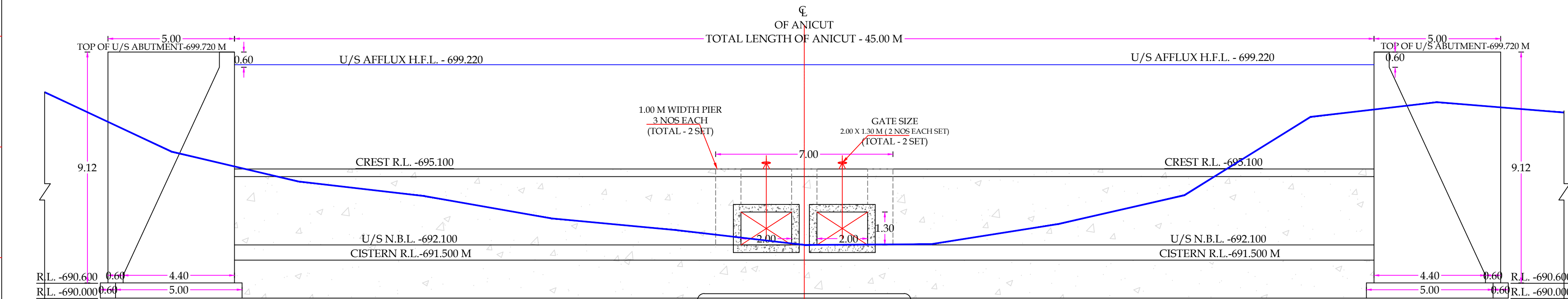
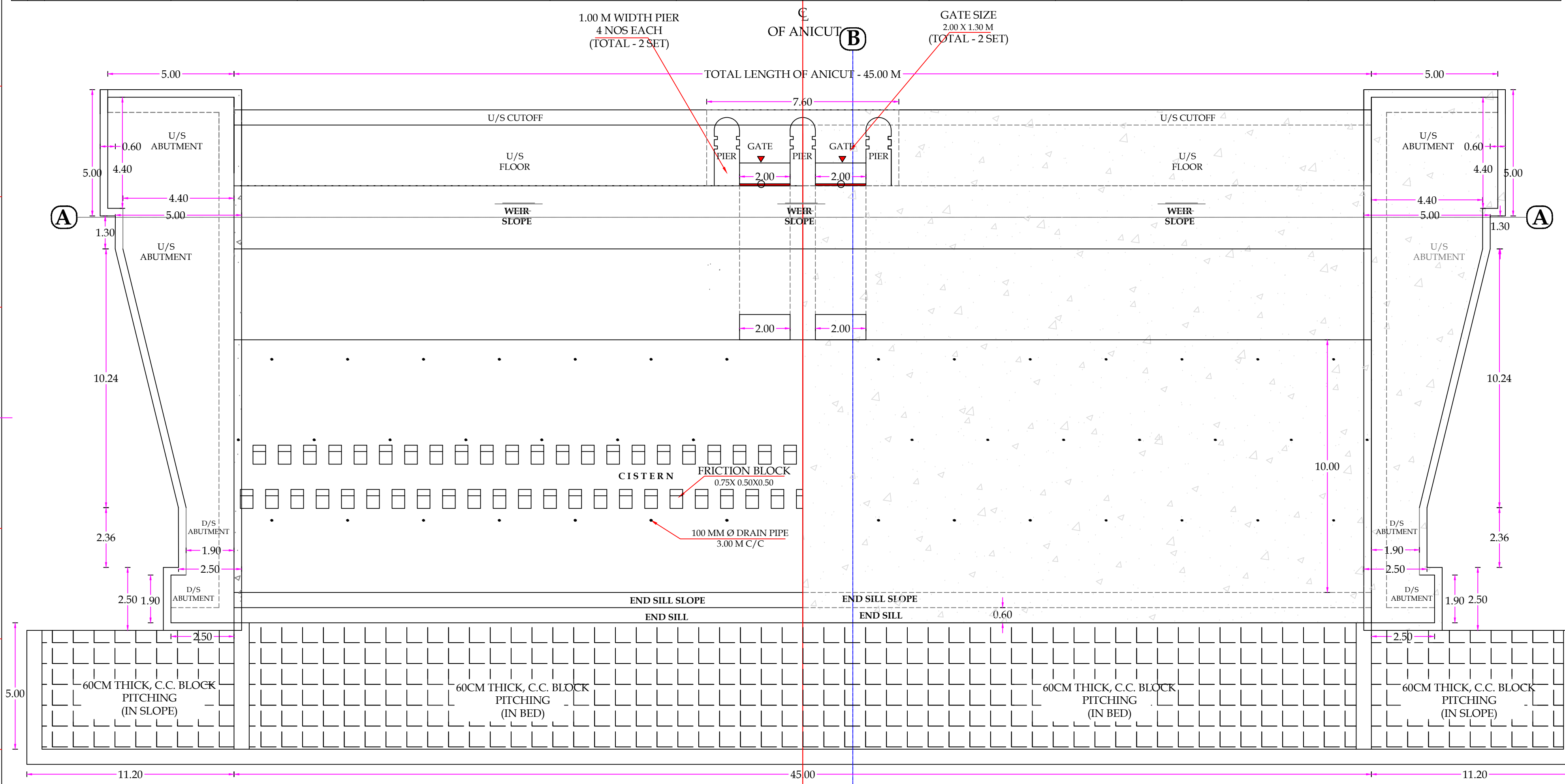


DRAWING OF SONHAT ANICUT SCHEME IN SONHAT RIVER



RD. GL.	-30.698.140	-25.695.790	-20.694.610	-15.694.030	-10.693.150	-5.692.680	0.692.100	5.692.130	10.692.920	15.694.060	20.697.740	30.697.330
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HALF TOP & HALF BOTTOM PLAN

SCALE - A

SPECIFICATION

Aggregates - All coarse and fine aggregates shall conform to IS-383:1970 and shall be tested to conform to IS-2386 part-1 to part VIII:1963.

Admixtures - To improve workability to concrete, admixture, conforming to IS-9103:1999 may be used.

Cement - PPC/OPC, 53 grade conforming to IS-12269:1987

Steel - All reinforcement bars shall be high yield strength deformed bars (grade designation S-415) conforming to IS-1786:1985. 5.00 mm nominal concrete covers shall be provided. Welding of reinforcement bars shall not be permitted. Minimum lap length of reinforcement shall be kept as 8M, where 'M' is the diameter of bars. Not more than 50% of reinforcement shall be lapped at any one location. Supporting chain of 12 mm diameter shall be provided at suitable intervals as per IS-2502:1963.

Gate - Gate should be as per IS-5620:1985.

Foundation Concrete for weir, pier, Retaining/Wing wall - Concrete concrete 1:2:4 with graded metal of maximum size of 40 mm.

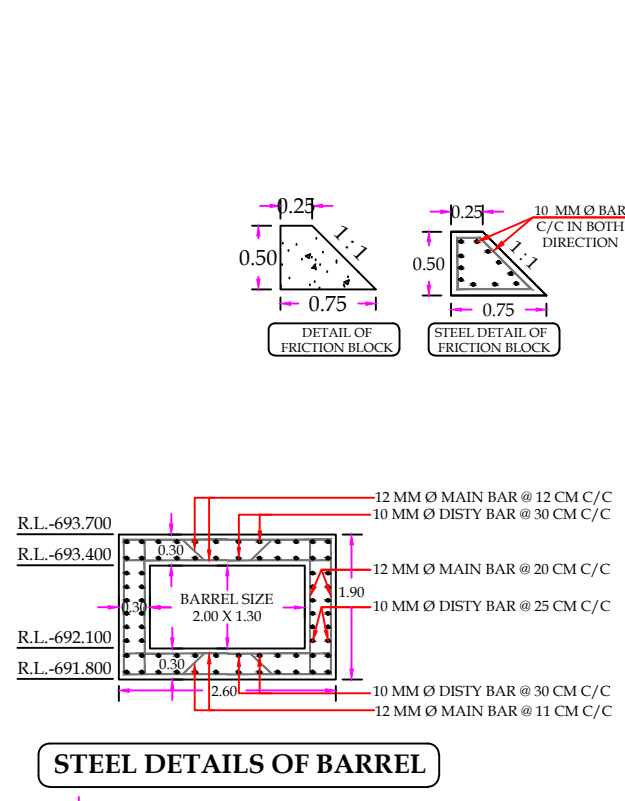
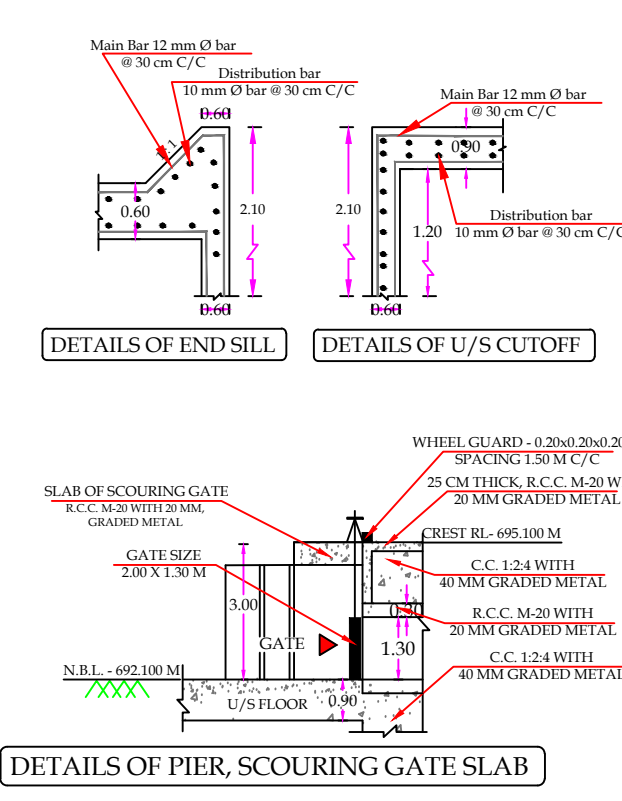
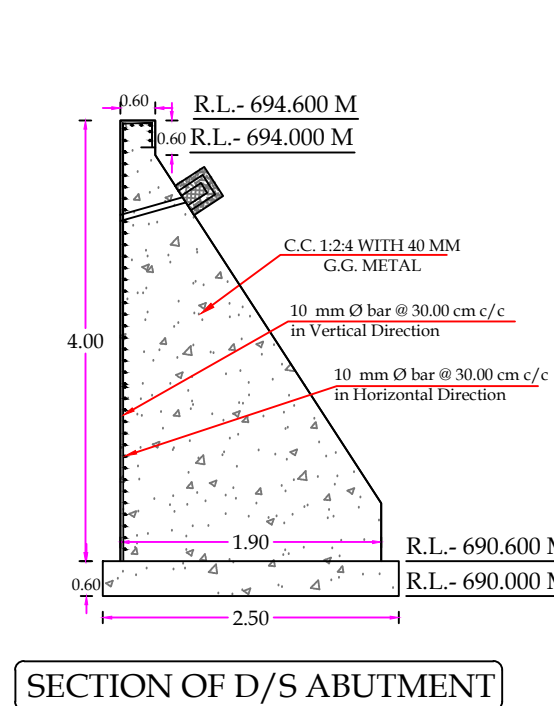
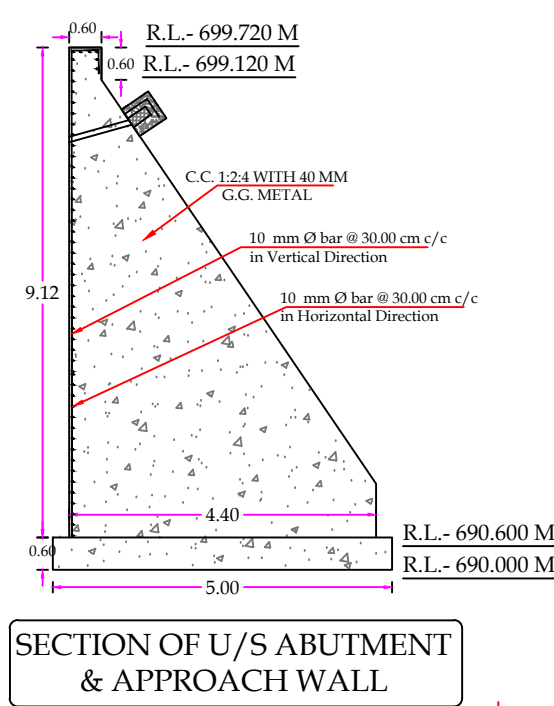
Weir Abutment & Return Wall - The entire weir and face of abutment return wall is enclosed by 60 cm thick layer of reinforced concrete M-15 with graded metal of maximum size 20 mm with nominal reinforcement of (10 mm Ø bar 30 cm c/c in both directions) of exposed surface for temperature and shrinkage effect. The bearing portion of weir will be filled up with plain cement concrete 1:2:4 with graded metal of maximum size 40 mm.

R.C.C. Work - R.C.C. Slab and Beam: Reinforced concrete concrete M-20 moderate with graded metal of maximum size 20 mm.

8.2. PIER - Cement Concrete 1:2:4 with graded metal of maximum size 20 mm.

Weir hole - 100mm dia. A.C. pipe with grouting @ 150 mm in horizontally as well as vertically above H.F.L.

U/S and D/S Protection Works - C.C. Block 1.20 x 1.20 x 0.60 m over 30 cm thick quarry spall C.C. 1:2:4 with 40 mm graded metal & 60 cm thick rip rap over 30 cm thick quarry spall.



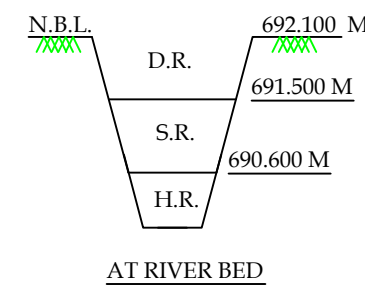
DATA

S.NO.	PERTICULARS	DATA	UNITS
1.	CATCHMENT AREA	115.50	Sq.km
2.	BED LEVEL OF RIVER	692.100	M
3.	H.F.L. OF RIVER	694.600	M
4.	LENGTH OF ANICUT	45.00	M
5.	HEIGHT OF ANICUT	3.00	M
	TOP OF BANK LEVEL OF RIVER	701.150	M

BAR BENDING SCHEDULE

S.NO.	NAME OF BAR	SHAPE OF BAR	DIA (IN MM)	SPA-CING (IN MM)	LENGTH OF ONE BAR (IN MTR)	QNTY (IN NOS)	TOTAL LENGTH (IN MTR)	UNIT WT. (PER KG)	TOTAL WT. (IN KG)
A FLOOR & WEIR WALL									
1	Main Bar		12	300	22.89	151	3456.39	0.888	3069.27 Kg
2	Disty Bar		10	300	45.00	77	3465.00	0.617	2137.91 Kg
B ABUTMENT & RETURN (U/S & D/S)									
1	Main Bar		10	300	9.42	111 x 2	2091.24	0.617	1290.30 Kg
2	Disty Bar		10	300	33.00	32 x 2	2112.00	0.617	1303.10 Kg
C APPROACH WALL									
1	Main Bar		10	300	9.42	84 x 4	1952.88	0.617	1952.88 Kg
2	Disty Bar		10	300	25.00	32 x 4	1974.40	0.617	1974.40 Kg
D PIER									
1	Main Bar		12	300	9.35	92	860.20	0.888	736.86 Kg
2	Disty Bar		10	300	27.30	32	873.60	0.617	539.01 Kg
E BOTTOM FLOOR OF GATE									
1	Inner Bar		12	300	2.07	56	115.83	0.888	102.86 Kg
2	Inner Bar		12	300	2.56	56	143.36	0.888	127.30 Kg
3	Outer Bar		12	150	2.07	110	227.52	0.617	140.38 Kg
4	Disty Bar		10	150	8.15	60	489.00	0.617	301.71 Kg
F TOP SLAB OF GATE									
1	Inner Bar		16	300	2.07	64	132.38	1.580	117.55 Kg
2	Inner Bar		16	300	2.56	64	163.84	1.580	145.49 Kg
3	Outer Bar		12	150	2.07	126	260.62	0.888	160.80 Kg
4	Disty Bar		10	150	9.35	60	561.00	0.617	346.14 Kg
G R.C.C. ROAD									
1	Main Bar		12	300	4.50	669	3010.50	0.888	2673.32 Kg
2	Disty Bar		10	300	200.00	16	3200.00	0.617	1974.40 Kg
H U/S CUTOFF									
1	Main Bar		12	300	6.90	151	1041.90	0.888	925.21 Kg
2	Disty Bar		10	300	45.00	24	1080.00	0.617	666.36 Kg
I D/S CUTOFF & END SILL									
1	Main Bar		12	300	6.98	151	1053.98	0.888	935.93 Kg
2	Disty Bar		10	300	45.00	24	1080.00	0.617	666.36 Kg
J FRICTION BLOCK									
1	Main Bar		10	300	3.14	186	583.86	0.617	360.24 Kg
2	Disty Bar		10	300	3.00	372	1116.00	0.617	688.57 Kg
K TOE WALL FOR PITCHING									
1	Main Bar		10	300	5.68	38	215.84	0.617	133.17 Kg
2	Disty Bar		10	300	10.90	20	218.00	0.617	134.51 Kg
L FRONT FLOOR									
1	Main Bar		10	300	3.00	151	453.00	0.617	279.50 Kg
2	Disty Bar		10	300	45.00	11	495.00	0.617	305.42 Kg
M WHEEL GUARD									
1	Main Bar		10	4 no.	1.80	115	206.10	0.617	127.16 Kg
2	Disty Bar		10	3 no	2.40	115	274.80	0.395	108.55 Kg
N BATHING GHAT									
1	Main Bar		12	150	5.50	67 x 2	603.00	0.888	535.46 Kg
2	Disty Bar		10	150	6.90	31 x 2	613.80	0.617	378.71 Kg
O R.C.C. BOX BARREL FOR SLUICE GATE									
AS PER ATTACHED SHEET= 495.86KG X 2 NO. GATE								991.72 Kg	
TOTAL STEEL WT (IN KG) :								26629.81 kg	
ADD 5% STEEL FOR WASTAGE & OVERLAP :								1331.49 kg	
NET TOTAL STEEL WT (IN KG) :								27961.30 kg	

DETAIL OF T.P. SECTION



CERTIFIED THAT THE STRATA SHOWN IN THE TRIAL PIT SECTION IS CORRECT WITH BEST OF MY KNOWLEDGE

SUB ENGINEER SUB DIVISIONAL OFFICER EXECUTIVE ENGINEER
WATER RESOURCES SUB DIVISION NO.2, WATER RESOURCES DIVISION, BAIKUNTHPUR KOREA (C.G.)
BAIKUNTHPUR KOREA (C.G.) BAIKUNTHPUR KOREA (C.G.)

GOVERNMENT OF CHHATTISGARH WATER RESOURCES DEPARTMENT
OFFICE OF THE EXECUTIVE ENGINEER, W.R.DIVISION, BAIKUNTHPUR KOREA (C.G.)

DRAWING OF SONHAT ANICUT SCHEME IN HASDEO RIVER

SUB ENGINEER	ASSISTANT ENGINEER (D) SHYAM BARNALI PROJECT CIRCLE AMBIKAPUR (C.G.)	ASSISTANT ENGINEER (D) HASDEO GANGA BASIN W.R. DEPTT. AMBIKAPUR (C.G.)
	EXECUTIVE ENGINEER (D) SHYAM BARNALI PROJECT CIRCLE AMBIKAPUR (C.G.)	EXECUTIVE ENGINEER (D) HASDEO GANGA BASIN W.R. DEPTT. AMBIKAPUR (C.G.)
SUB DIVISIONAL OFFICER WATER RESOURCES SUB DIVISION NO.2, BAIKUNTHPUR KOREA (C.G.)	ASSISTANT ENGINEER, WATER RESOURCES DIVISION, BAIKUNTHPUR KOREA (C.G.)	SUPERINTENDING ENGINEER (D) HASDEO GANGA BASIN W.R. DEPTT. AMBIKAPUR (C.G.)
EXECUTIVE ENGINEER, WATER RESOURCES DIVISION, BAIKUNTHPUR KOREA (C.G.)	SUPERINTENDING ENGINEER, SHYAM BARNALI PROJECT CIRCLE, AMBIKAPUR (C.G.)	CHIEF ENGINEER, HASDEO GANGA BASIN W.R. DEPTT. AMBIKAPUR (C.G.)

SCALE(A) :- 1CM=1.00 M

DRAWING NO :-