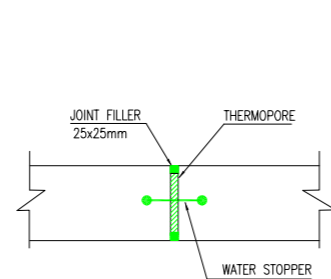
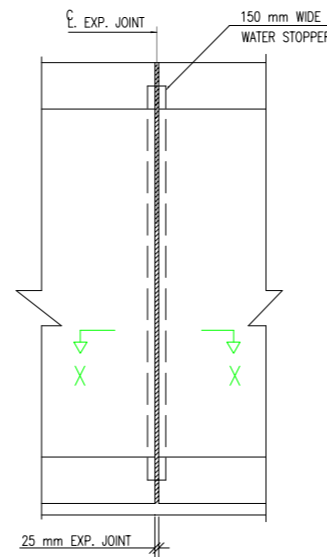


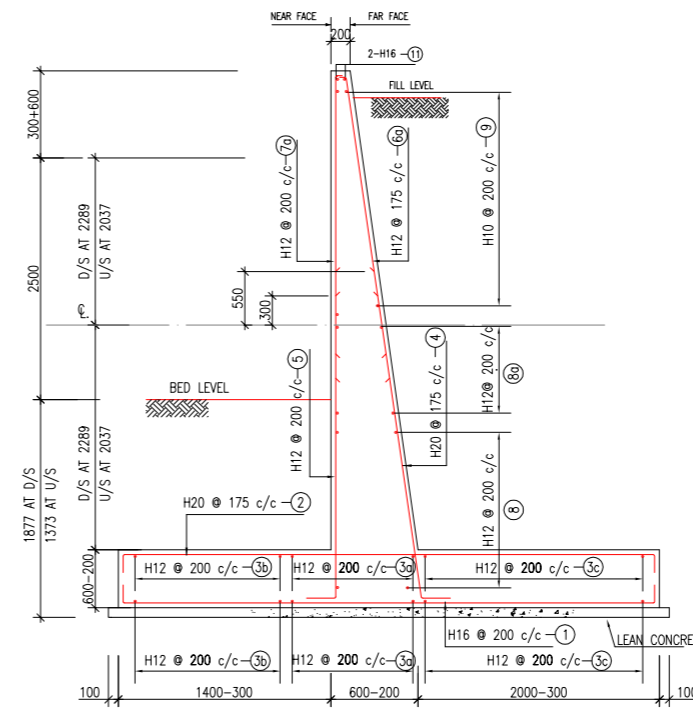
SECTION 2-2  
SCALE:- 1:30



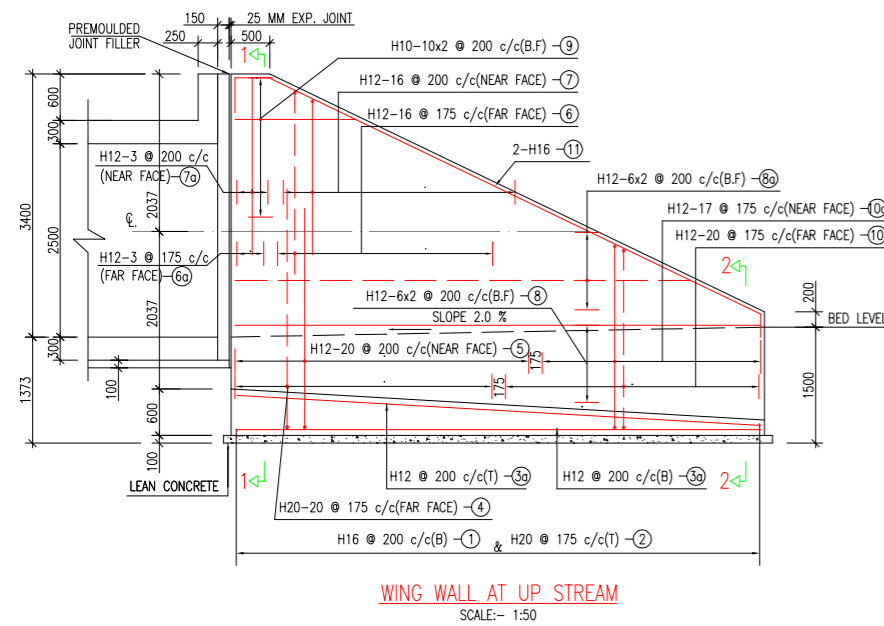
SECTION X-X



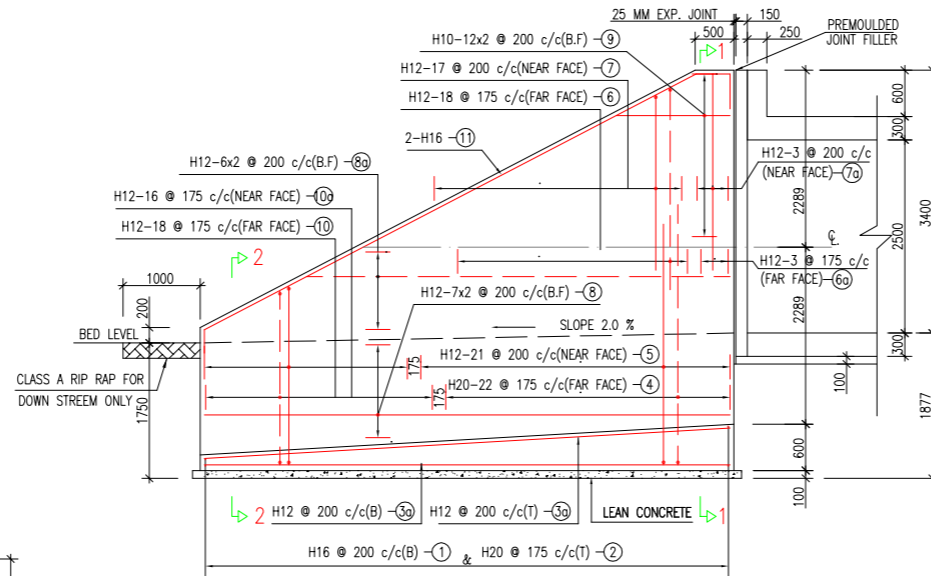
DETAIL OF EXPANSION JOINT  
SCALE:- 1:25



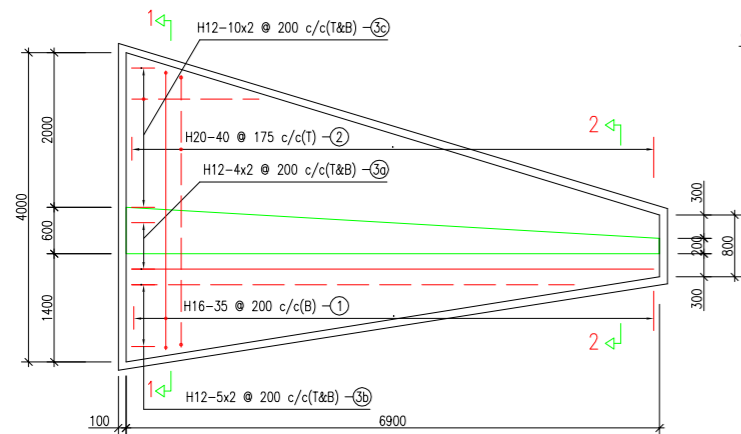
SECTION 1-1  
SCALE:- 1:40



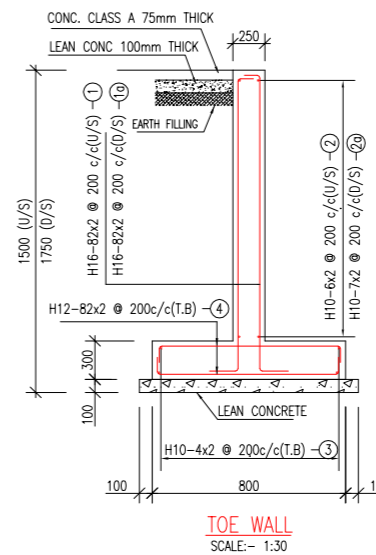
WING WALL AT UP STREAM  
SCALE:- 1:50



WING WALL AT DOWN STREAM  
SCALE:- 1:50



FOOTING PLAN  
SCALE:- 1:50



TOE WALL  
SCALE:- 1:30

- NOTE:-
- CLEAR COVER TO REINFORCEMENT TO BE:-  
50 mm-BOX  
40 mm-PARAPET WALL  
50 mm-EXPANSION JOINT (BOX)  
WING WALL & TOE WALL TO BE:-  
75 mm-EARTH FACE  
40 mm-OTHER FACE
  - ALL BARS ARE GRADE-60 STEEL
  - IF NOT SPECIFIED OTHERWISE CONCRETE IS CLASS "A"
  - ALL DIMENSIONS ARE IN MILLIMETERS

- REFERENCES:-
- PLAN, PROFILE SECTION, TOE WALL, PARAPET WALL & EXPANSION JOINT DETAILS FROM DWG.NO.Z-2335/C/01 EDITION 2
  - REINFORCEMENT DETAILS OF SINGLE CELL CULVERT FROM DWG.NO.Z-2335/C/08 EDITION 2
  - REINFORCEMENT DETAILS OF WING WALLS FROM DWG.NO.Z-2335/C/07 EDITION 2
  - REINFORCEMENT DETAILS OF TOE WALL FROM DWG.NO.Z-2335/C/01 EDITION 2

BAR BENDING & CUTTING SCHEDULE

MARK	BAR SHAPE	DIA OF BAR (mm)	NO. OF BAR	LENGTH (M.)	CORR. CUT LENGTH (M.)	TOTAL LENGTH (M.)	UNIT WEIGHT (KG/M.)	TOTAL WEIGHT (KG)	
<b>WING WALL PORTION</b>									
<b>FOOTING PLAN (2 NOS.)</b>									
1	0.30, 0.10	MAX.3.80 MIN.0.68	16 @ 200c/c	35x2	2.640 (AV.)	2.558 (AV.)	179.060	1.578	282.557
2	0.30, 0.10	MAX.3.80 MIN.0.68	20 @ 175c/c	40x2	2.640 (AV.)	2.530 (AV.)	202.400	2.466	499.118
3a		6.75	12 @ 200c/c	2(4x2)	6.750	6.750	108.000	0.888	95.904
3b		MAX.5.72 MIN.0.70	12 @ 200c/c	2(5x2)	3.210 (AV.)	3.210 (AV.)	64.200	0.888	57.010
3c		MAX.6.24 MIN.0.33	12 @ 200c/c	2(10x2)	3.285 (AV.)	3.285 (AV.)	131.400	0.888	116.683
<b>WING WALL DOWN STREAM (1 NO)</b>									
4	0.30	3.36	20 @ 175c/c	22	3.660	3.605	79.310	2.466	195.578
5	0.30	3.11	12 @ 200c/c	21	3.410	3.379	70.959	0.888	63.012
6	0.10	MAX.2.73 MIN.1.18	12 @ 175c/c	18	2.055 (AV.)	2.024 (AV.)	36.432	0.888	32.352
6a	0.10	2.79	12 @ 175c/c	3	2.890	2.859	8.577	0.888	7.616
7	0.10	MAX.2.44 MIN.0.78	12 @ 200c/c	17	1.710 (AV.)	1.679 (AV.)	28.543	0.888	25.346
7a	0.10	2.54	12 @ 200c/c	3	2.640	2.609	7.827	0.888	6.950
8		6.80	12 @ 200c/c	7x2	6.800	6.800	95.200	0.888	84.538
8a		MAX.6.79 MIN.4.87	12 @ 200c/c	6x2	5.830 (AV.)	5.830 (AV.)	69.960	0.888	62.124
9		MAX.4.48 MIN.0.44	10 @ 200c/c	12x2	2.460 (AV.)	2.460 (AV.)	59.040	0.616	36.369
10	0.10	MAX.2.28 MIN.1.75	12 @ 175c/c	18	2.215 (AV.)	2.153 (AV.)	38.754	0.888	34.414
10a	0.10	MAX.3.11 MIN.1.75	12 @ 175c/c	16	2.630 (AV.)	2.568 (AV.)	41.088	0.888	36.486
11	0.45, 0.44	7.17	16 @ 200c/c	2	8.360	8.313	16.626	1.578	26.236
<b>WING WALL UP STREAM (1 NO)</b>									
4	0.30	3.11	20 @ 175c/c	20	3.410	3.355	67.100	2.466	165.469
5	0.30	2.86	12 @ 200c/c	20	3.160	3.129	62.580	0.888	55.571
6	0.10	MAX.2.48 MIN.1.22	12 @ 175c/c	16	1.950 (AV.)	1.919 (AV.)	30.704	0.888	27.265
6a	0.10	2.54	12 @ 175c/c	3	2.640	2.609	7.827	0.888	6.950
7	0.10	MAX.2.20 MIN.0.76	12 @ 200c/c	16	1.580 (AV.)	1.549 (AV.)	24.784	0.888	22.008
7a	0.10	2.29	12 @ 200c/c	3	2.390	2.359	7.077	0.888	6.284
8		6.80	12 @ 200c/c	6x2	6.800	6.800	81.600	0.888	72.461
8a		MAX.6.68 MIN.4.60	12 @ 200c/c	6x2	5.640 (AV.)	5.640 (AV.)	67.680	0.888	60.100
9		MAX.4.18 MIN.0.44	10 @ 200c/c	10x2	2.310 (AV.)	2.310 (AV.)	46.200	0.616	28.459
10	0.10	MAX.3.08 MIN.1.49	12 @ 175c/c	20	2.485 (AV.)	2.423 (AV.)	48.460	0.888	43.032
10a	0.10	MAX.2.85 MIN.1.51	12 @ 175c/c	17	2.380 (AV.)	2.318 (AV.)	39.406	0.888	34.993
11	0.45, 0.44	7.06	16 @ 200c/c	2	8.250	8.203	16.406	1.578	25.889
TOTAL = 2210.774 Kg									
<b>TOE WALL (2 NOS.)</b>									
1	0.10	1.29	16 @ 200c/c	82x2	1.690	1.608	263.712	1.578	416.138
1a	0.10	1.54	16 @ 200c/c	82x2	1.940	1.858	304.712	1.578	480.836
2		4.63	10 @ 200c/c	6x2	16.630	16.630	199.560	0.616	122.929
2a		4.63	10 @ 200c/c	7x2	16.630	16.630	232.820	0.616	143.417
3		4.63	10 @ 200c/c	2(4x2)	16.630	16.630	266.080	0.616	163.905
4	0.15	.65	12 @ 200c/c	2(82x2)	0.95	0.888	291.264	0.888	258.942
TOTAL = 1585.867 Kg									
GRAND TOTAL = 3796.641 Kg									

REINFORCEMENT DETAIL OF WING WALL & TOE WALL OF CULVERT NO.BC-47,KM=27+168  
SIZE=1-3x2.5