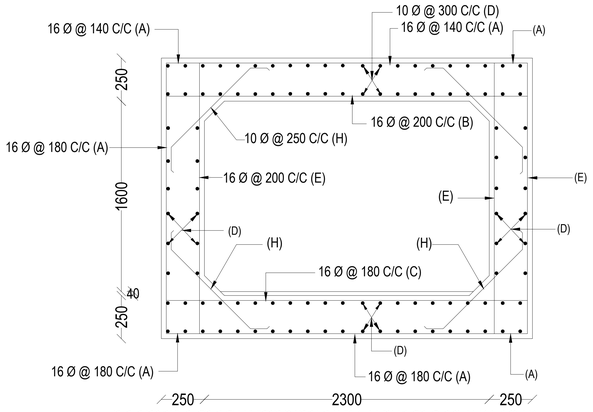
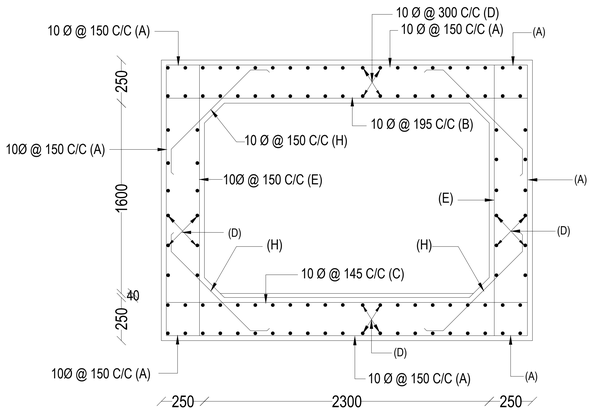


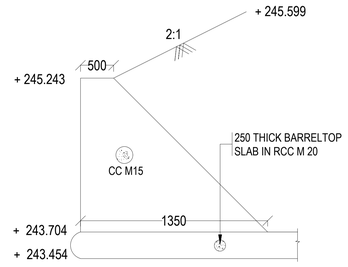
R.C.C.DETAILS OF BOX UNDER EARTH BANK (1 VENT OF 2.30 M X 1.60 M)



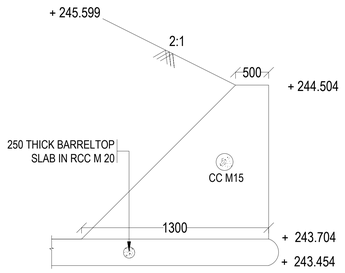
R.C.C.DETAILS OF BOX UNDER CANAL TROUGH (1 VENT OF 2.30 M X 1.60 M)

REINFORCEMENT SCHEDULE IN BARREL

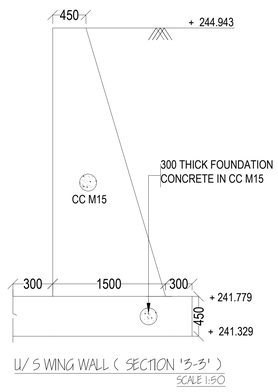
S.NO.	TYPE	SHAPE	Ø IN MM AND SPACING (UNDER EARTH BANK)	Ø IN MM AND SPACING (UNDER CANAL)
1	A		16 @ 140	10 @ 150
2	B		16 @ 200	10 @ 195
3	C		16 @ 180	10 @ 145
4	E		16 @ 200	10 @ 150
5	H		10 @ 300	10 @ 300
6	D		10 @ 300	10 @ 300



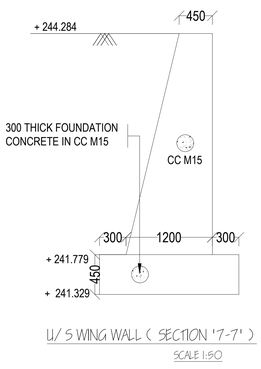
U/S HEAD WALL (SECTION '1-1')
SCALE 1:50



D/S HEAD WALL (SECTION '5-5')
SCALE 1:50



U/S WING WALL (SECTION '3-3')
SCALE 1:50



D/S WING WALL (SECTION '7-7')
SCALE 1:50

Sd/- 06/04/2010
SUPERINTENDING ENGINEER
G.N.S.S. CIRCLE, KADAPA.

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.FOLLOW FIGURED DIMENSIONS AND DO NOT SCALE THE DRAWING.
2. BACK FILLING SHALL BE DONE SIMULTANEOUSLY WITH THE RAISING OF THE WINGS & RETURNS USING SOILS WITH ANGLE OF REPOSE NOT LESS THAN 28° AND PERMEABILITY COEFFICIENT 'K' VALUE NOT MORE THAN 3M/YEAR.
3. THE MAXIMUM STRESSES ON FOUNDATION STRATA WORKED OUT FOR THE WINGS & RETURNS ARE SHOWN IN STRESS TABE. IF THE FOUNDATION STRATA METWITH DURING EXECUTION IS INFERIOR AND CANNOT TAKE THE DESIGNED STRESSES, THE SECTIONS ARE TO BE SUITABLY REVISED.
4. MINIMUM COVER TO ALL REINFORCEMENT SHALL BE 25 MM TO ENSURE PROPER COVER OF CONCRETE TO REINFORCEMENT.
5. ALL REINFORCING STEEL SHALL BE OF HIGH YIELD STRENGTH DEFORMED BARS, (FE 415) CONFORMING TO IS 1786 - 1985.
6. JOINTS OR LAPPING OF BARS IN MAIN REINFORCEMENT SHALL BE AVOIDED AS FAR AS POSSIBLE. HOWEVER IF LAPS ARE INEVITABLE, THE PROVISION IN CLAUSE 304.6.6 OF IRC 21 - 2000 SHALL BE STRICTLY FOLLOWED.
7. BENDING OF REINFORCEMENT BARS SHALL BE AS PER IS - 2502. SUPPORTING CHAIRS OF 12 MM DIA SHALL BE PROVIDED AT SUITABLE INTERVALS AS PER IS - 2502.
8. CONCRETE SHALL BE PREPARED IN THE MECHANICAL MIXERS OF CAPACITY NOT LESS THAN 200 LITRES. PROPER COMPACTION OF CONCRETE SHALL BE ENSURED BY USE OF FORM AND NEEDLE VIBRATORS.
9. ALL HAUNCHES PROPOSED IN THE BOXES ARE OF 150 X 150 SIZE

STRESS TABLE

S.NO	DESCRIPTION OF ITEMS	STRESSES IN T / SQ.M			
		IN CONCRETE		ON SOIL	
		MAX.	MIN.	MAX.	MIN.
1	U/S HEAD WALL	6.222	1.989	-	-
2	D/S HEAD WALL	2.253	2.112	-	-
3	U/S WING WALL & RETURN	17.919	-2.283	12.552	2.917
4	D/S WING WALL & RETURN	13.082	-1.080	8.798	3.282

CONCRETE SPECIFICATIONS

S.NO.	PARTICULARS	GRADE OF CEMENT CONCRETE AS PER IS:456-2000	MAX SIZE OF GRADED COARSE AGGREGATE AS PER IS:383
A	APRON	CC M15 GRADE	20 MM
B	WINGS, RETURNS,HEAD WALLS, DROP WALLS & FOUNDATIONS	CC M15 GRADE	20 MM
C	WEARING COAT	CC M25 GRADE	20 MM
D	SEALING COAT	CC M25 GRADE	20 MM
E	BOX	RCC M2O GRADE	20 MM

REFERENCE DRAWINGS

1. DRAWING NO. GLIS/SKD/UT-4.725/001/2009 - GENERAL PLAN AND SECTIONAL ELEVATION

REVISION NO:	DRAWN	CHECKED	APPROVED	DATE
CLIENT	GOVERNMENT OF ANDHRA PRADESH IRRIGATION & CAD DEPARTMENT			
PROJECT	GANDIKOTA LIFT IRRIGATION SCHEME SANTHAKOVURU DISTRIBUTORY			
TITLE	UNDER TUNNEL AT KM. 4.275 RCC DETAILS OF BOX			
CONTRACTORS	KBL - MCCL (JV) HYDERABAD			

DRAWING NO:	SCALE	DATE
GLIS/SKD/UT/ 4.725/002/2009	AS INDICATED	