



**GOVERNMENT OF TAMILNADU  
WATER RESOURCES ORGANISATION  
PUBLIC WORKS DEPARTMENT  
CHENNAI REGION, CHENNAI**

**TAMILNADU IRRIGATED AGRICULTURE MODERNISATION AND  
WATER RESOURCES MANAGEMENT PROJECT**

**REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM SUB  
BASINS UTILISING THE SAVINGS - PHASE - III**

**PACKAGE NO.I IAMWARM/WRD/ GMN/ LEFT OUT WORKS/ III**

**GOMUKHI SUB BASIN  
DETAILED PROJECT REPORT**

**ESTIMATE AMOUNT : 587.47 LAKHS**

### Gomukhi SubBasin

S.No	Originally Taken up in Phase III			Now Proposed	
	Package No	Administrative sanction in lakhs(AS)	Revised Administrative sanction in lakhs(RAS)	Package No	Amount in Lakhs
1	Package I	303.15	-	Package I	228.11
2	Package II	435.55	-	Package II	176.45
3	Package III	296.95	-	Package III	182.91
4	Package IV	361.11	-		
5	Package V	160.39	-		
<b>Total</b>		<b>1557.15</b>			<b>587.47</b>

### Gomukhi SubBasin

S.No	Description	Total No of infrastructure in the Sub Basin	Already taken up under Phase III (All are in Nos)		Total No of Leftout infrastructure in the Sub Basin	Now proposed in Left Out works (All are in Nos)	
			Repairs	Reconstruction		Repairs	Reconstruction
<b>1</b>	<b>Tanks</b>						
	Tank Bund	80	68		12	12	
	Sluices	148		41	30	3	11
	Weirs	96	80		12	10	
	Supply Channel	115	52		12	3	
	Field Channel (desilting)	80			2	2	
<b>2</b>	<b>Anicuts</b>						
	Head Sluices	15		1	4	1	18 / construction
	Repairs to anicuts	43	43		7	7	
	Flood Banks	15	3		6	6	
	Supply Channels	43	18				
	Shutters	14			14	14	

1.No Sluices reconstruction is proposed in the tanks where already earthwork bund strengthening in IAMWARM

2.For the last five years no tanks , anicuts have been rehabilitated under any scheme .

# **DETAILED PROJECT REPORT ON REHABILITATION OF LEFT OUT TANKS IN PHASE III OF GOMUKHI SUB BASIN IN VILLUPURAM AND CUDDALORE DISTRICT.**

**Estimate Amount Rs. 587.47 Lakhs.**

## **INTRODUCTION : -**

The Government of Tamilnadu have taken a number of progressive actions on water resources and irrigation management, particularly through the bank assisted Tamil Nadu Water Resources Consolidation Project (WRCP) which was closed in September 2004 with a satisfactory rating. Now the Tamil Nadu Government have decided to implement a project for the modernization of the Traditional Irrigation systems in Tamil Nadu with a loan assistance from World Bank. The World Bank had also come forward to assist the Tamilnadu Government's proposal. Under the World Bank funded project of "Irrigated Agriculture Modernization and Water Resources Management –(WRCP- II) about 16 river sub basins have been selected and proposed to be taken up under the control of Water Resources Organisation Wing of Public Works Department of Tamilnadu. The Gomukhinadhi sub basin is one among the sixteen.

### **1. Gomukhi Nadhi Sub Basin.**

The Vellar river originates in the Chitteri Hills of Darmapuri District in the name of Anaimaduvu river and Thumbal river and Singipuram are originates at Jallattu reserve forest area at 8 Km East of Salem taluk in Salem district and flows through Villupuram, Cuddalore, Namakkal , Trichy and Perambalur District and finally confluence with the Bay of Bengal. The Vellar basin is bounded by Pennaiyar and Paravanar basins with North, Cauvery basin in the West and South and the Bay of Bengal in the East.

The Vellar basin has been divided into 7 sub basins and Gomukhi is one of the sub basins. Gomukhi originates from the eastern slopes of Kalrayan hills in Kallakurichi at an altitude of about 1298 metres. The river flows for a length of 13Km at which Gomukhi Nadhi reservoir has been constructed across the river at about 16Km to the North West of Kallakurichi town. (About 44Km below this reservoir a tributary called Mayura Nadhi joins Gomukhi Nadhi on its right flank. Mayura Nadhi runs for a length of 38Km from its origin which is also on the South Eastern slopes of Kalrayan hills and north east of Chinnasalem taluk. Two sub tributaries namely Thirumanimuktha nadhi on the right flank and Namasivayapuram Odai on the left join the Mayura Nadhi at 8 Km below the confluence of the Mayura nadhi, the Gomukhi nadhi confluence with the Manimuktha Nadhi near Nallur. The taluks covered in this subbasin are Kallakurichi (Villupuram District), Atthur (Salem District) and Virudhachalam and Thittakudi (Cuddalore District). It receive an annual reinfall of 956 mm with its major share during north East monsoons. The winter water level varies from 1 to 1.5m and the summer water level varies from 3.55 to 4.00 m.

In phase III of IAMWARM Project, rehabilitation works to Irrigation structures in Gomukhi Sub basin in Villupuram and Cuddalore district have been taken up during the year 2011-2012 and works are in progress. Gomukhi sub basin falls under Vellar Basin which feed many irrigation tanks lying under respective water courses.

Under Phase III of IAMWARM Project for Gomukhi Sub basin the estimate were prepared for the schedule of rates for the year 2009-2012 and cleared by the world bank and subsequently the Government have administratively sanctioned the proposals in G.O..M.s. No.315 / Public Works (WRI) Department dated 27.10.2010. For the Gomukhi sub basins Rs. 1567.181 lakhs has been provided for the rehabilitation of works in Gomukhi sub basin comprising 5 Packages. There are 68 Non system tanks in this sub basin comprising 5 packages in Villupuram and Cuddalore District.

In these packages 68 tanks and 43 Anicuts have been taken up and these works are nearing completion.

By utilizing the overall savings amount available in the project additional rehabilitation works are proposed in this Sub Basin area, based on the agreed actions in the wrap up meeting chaired by the Finance secretary on 17.9.2012, which was communicated in Engineer in Chief's, WRD Letter No Tech Cell / 57252 / WB Mission / 2009 Dated 05.10.2012.

The Block Level Water Users Association meetings were conducted during November 2012 and feedback obtained regarding the success of the IAMWARM Project. In the above meetings, a questionnaire (Department) was given to the WUA representatives and the feed back obtained.

By analyzing the feed backs given by them it is found that some essential works were left out in the IAMWARM project. Based on their feed back a walk through survey was conducted again along with the WUA President and TC Members and left out essential components were identified and the particulars were gathered accordingly.

### **Tanks :**

In this Sub basin totally 68 Nos of tanks were taken up for rehabilitated under IAMWARM project out of 80 Nos of tanks available in the Sub Basin area. In those 68 tanks all the infrastructures are renewed and brought to farmers use successfully. But, some of tanks & components were left out due to various reasons. Now they are brought in to Participatory Irrigation Management by forming WUA's and made awareness. In such tanks reconstruction of Sluices, reconstruction of Weirs, Repair to Sluice, Repair to Weirs, Strengthening tank bund are proposed in this additional proposal.

Considering the ayacut under these tanks, these water bodies require urgent renovation works so as to bring them to the designed standards and provide water irrigation facilities to the ayacut under the respective tanks.

## **Tank Bund**

Out of 80 tanks in this sub basin 68 tank bund standardization was carried out and it is now proposed to take up left out of 12 tanks bund standardization.

The following provisions are made under tank bund standardization.

1. Tank bund standardization are proposed to following standards

1. Top Width : 3.00M
2. Front & Rear slope : 2 : 1
3. Free board : 1.50M

2.) Provisions have been made for gravel Topping to one tank.

3.) TBL Stone fixing for all 12 tanks.

4.) RCC Boundry stone fixing and fore shore bund formation for 12 tanks.

5.) Turfing at rear side slope for all 12 tanks.

## **SLUICES**

Out of 148 Sluices in this sub basin 41 Sluices has been Repaired and Reconstructed

Now 2 Sluices is Proposed to Repairs 12 Sluices is proposed to Reconstructed.

- In two sluices Repairs to Rear cistern portion are proposed.
- Reconstruction with wing wall type are proposed 12 sluice

## **WEIR**

Out of 96 weir in this sub basin 80 weir has been Repaired

Now 10 weir is proposed to repairs, & Flood bank standardization.

1.) Following repairs in the weir are proposed

1.) skin wall, E.W foundation, M10 using 40mm , Rcc M20 using 20mm with steel and D/S apron PCC M20 using 20mm , with cutoff wall M15 using 20mm.

- Skin walls are proposed for 2 weirs(i.e) Vadakkanandal Tank and Thenkeeranur Large Tank.
- Repairs to D/S apron, D/S cutoff wall, are proposed for 10 weirs

Now 5 supply channel of total length 14.10 KM one proposed to desilting and providing for retaining wall at varies place to length from 50m to 100m are made in four supply channels , Bed bar provisions are made at every 200m interval in the supply channel.

Now two tanks field channels are proposed to desilting and one culvert are proposed at surplus course in one tank.

Apart from this, Sluice are to be reconstructed and weirs are to be repaired so as to make the water bodies fully functional. Hence these tanks can be taken up under IAMWARM Project in Gomukhi Sub Basin.

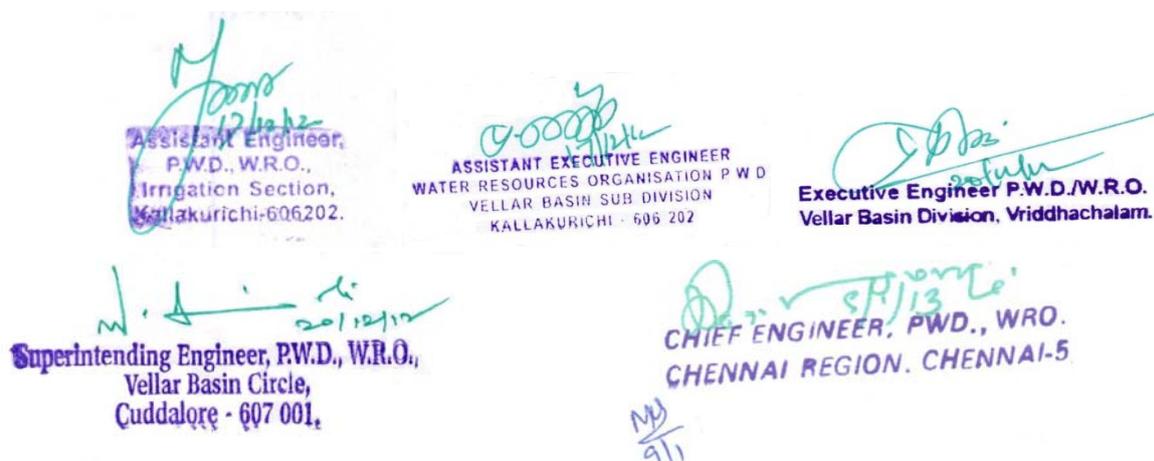
### **Anicuts :**

In this Sub basin totally 43 Nos of anicuts were taken up for rehabilitated under IAMWARM project out of 43 Nos of anicuts available in the Sub Basin area. In those 43 anicuts all the infrastructures are renewed and brought to farmers use successfully. But, 30 No of anicuts components were left out due to various reasons. Now they are brought in to Participatory Irrigation Management by forming WUA's and made awareness. In such Anicuts formation of flood banks, Repairs to Hed sluices, renewel of sand vent and hed sluice shutters and left out anicuts repairs in this additional proposal.

Considering the ayacut under these anicuts, these water bodies require urgent renovation works so as to bring them to the designed standards and harvest water to provide irrigation facilities to the ayacut under the respective anicuts. The bunds of the anicuts have to be strengthened to following standards.

These additional tanks and anicuts are in Gomukhi sub basin cover Villupuram District.

By utilizing the overall savings amount available in the project the following essential components like strengthening of left out tank bund, Reconstruction of left out Sluices and Weirs are provided wherever needed. The WUA's representation also considered, for the essential requirement in the water bodies and this additional proposal has been prepared. The total cost for the DPR works out to Rs. 587.47 Lakhs.



The image contains five official stamps and signatures from P.W.D./W.R.O. officials. The stamps are as follows:

- Top Left:** Assistant Engineer, P.W.D., W.R.O., Irrigation Section, Kallakurichi-606202. (Signature: M. S. Sankar)
- Top Middle:** ASSISTANT EXECUTIVE ENGINEER, WATER RESOURCES ORGANISATION P W D, VELLAR BASIN SUB DIVISION, KALLAKURICHI - 606 202. (Signature: M. S. Sankar)
- Top Right:** Executive Engineer P.W.D./W.R.O., Vellar Basin Division, Vriddhachalam. (Signature: S. P. Sankar)
- Bottom Left:** Superintending Engineer, P.W.D., W.R.O., Vellar Basin Circle, Cuddalore - 607 001. (Signature: M. S. Sankar, dated 20/12/12)
- Bottom Right:** CHIEF ENGINEER, PWD., WRO, CHENNAI REGION, CHENNAI-5. (Signature: S. P. Sankar, dated 13/12/12)

There is also a small handwritten note at the bottom right: "MS/9/11".

## Statement - I

### Rehabilitation of left out works in Gomukhi sub basin.

#### Abstract showing the details of Rehabilitation Works proposed

Sl.No.	Description	Tanks	Anicut	Supply channel in KM.
		Nos.	Nos.	
1	Available Infrastructure in the sub basin	80	43	215.48
2	Rehabilitation works taken up under IAMWARM Project	68	43	205.78
	a) Infrastructure in which all the components are in good condition and does not require rehabilitation now	68	13	201.38
	b) Infrastructures taken up under IAMWARM but certain components not taken up then, but require rehabilitation now.	-	30	4.4
3	Tanks not taken up for rehabilitation since 2005 under any other schemes.	12	-	9.7
	a) Infrastructure in which all the components are in good condition and does not require rehabilitation now.	-	-	-
	b) Infrastructures in which certain components not taken up since 2005 but require rehabilitation now.	12	-	9.70
4	Total No. of infrastructures requiring rehabilitation now.	12	30	14.10

1. Certified that the works are proposed in the selected IAMWARM Sub basin area.
2. Certified that the Panchayat Union tanks are not considered in this Project.
3. Certified that for item 2b, the components of the infrastructure now proposed were not taken up under IAMWARM Project.
4. For Items No.3 - Certified that the works are not executed under various scheme(Viz., NABARD, Part II Schemes, etc.,) and IAMWARM since 2005.



Nodal Officer



Superintending Engineer



MS  
9/11  
3/1/18  
Chief Engineer

**Statement II - A**  
**REHABILITATION OF LEFT OUT TANKS & INFRASTRUCTURE IN GOMUKHI SUB BASIN OF IAMWARM PROJECT**  
**REHABILITATION OF TANK WORKS**

Name of sub basin: GOMUKHI NADHI SUB BASIN

Amount in Lakhs

Sl.No	Name of Tanks	Tank Bund Improvements		Repairs to Sluice		Reconstruction of sluices		Repairs to weirs		Reconstruction to weirs		Shutter Renewal		Total
		Length	Amount	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount	
1	Emapair Tank	1640	13.18			2	7.71	1	18.27					39.16
2	Thenkeeranur Large Tank	725	6.66	1	2.36			1	12.84					21.87
3	Neelamangalam Tank	2475	20.62	1	1.75			1	12.57					34.94
4	Ulagamkathan Tank	1100	9.04											9.04
5	Malaikottalam Tank	2200	7.74			2	8.91	1	6.21					22.87
6	Ogaiyur Tank	1700	12.33					1	7.11					19.44
7	Vanavaretti Tank	1500	9.58			1	4.36	1	7.05					20.99
8	Vadakanandal Large Tank	1200	12.54			2	7.70	1	4.53					24.78
9	Paithanthurai Tank	1700	12.27			1	3.91							16.17
10	Elavadi Tank	1350	10.55			2	6.47							17.02
11	Siruvathur Large Tank	1400	7.36			2	7.39	2	2.03					16.78
12	Siruvathur Chitteri	900	8.51					1	1.22					9.73
	<b>TOTAL</b>	<b>17890</b>	<b>130.40</b>	<b>2</b>	<b>4.11</b>	<b>12</b>	<b>46.45</b>	<b>10</b>	<b>71.83</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>252.79</b>

**Tank bund**

Provisions are made for bund strengthening, TBL Stones, Boundry Stone, Turfing at rear slope for all tanks, and Gravel topping at one tank.

**Weir Repairs.**

1. Skin wall is proposed for Thenkeeranur tank and Vadakkanandal large tank.
2. Repairs to D/S apron, D/S cutoff wall, are proposed for all the 10 Weirs.

**Sluices.**

In Thenkeeranur large tank and Neelamangalam tank repairs to Rear cistern portion are proposed , and Reconstruction of slice are proposed to 12 Sluices.

  
Nodal Officer

  
Superintending Engineer

Chief Engineer

**Statement II - B**  
**REHABILITATION OF IRRIGATION CHANNELS**

Name of sub basin: **GOMUKHI NADHI SUB BASIN**

Amount in Lakhs

Sl.No	Name of Tanks	Desilting of Irrigation Channel		Lining of Irrigation channel		Repairs to Drops, Syphon cistern		Repairs to culvert aqueduct etc.,		Shutter Renewal		Total
		Length	Amount	No	Amount	No	Amount	No	Amount	(No)	Amount	
1	Thenkeeranur Large Tank	1000	0.07									0.07
2	Neelamangalam Tank	2300	0.19									0.19
3	Elavadi Tank							1	4.34			4.34
	<b>Total</b>	<b>3300</b>	<b>0.26</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>1</b>	<b>4.34</b>	<b>0</b>	<b>0.00</b>	<b>4.59</b>

Provisions made for desilting the field channel and one culvert is proposed.

  
Nodal Officer

  
Superintending Engineer

Chief Engineer

**Statement II - C**  
**REHABILITATION OF ANICUTS AND SUPPLY CHANNEL**

**Name of sub basin: GOMUKHI NADHI SUB BASIN**

**Amount in Lakhs**

Sl.No	Name of Anicut/Supply Channel	Flood Bank		Repairs to Anicut		Repairs to Head Sluice		Shutter Renewal		Supply Channel		Total
		Length	Amount	No	Amount	No	Amount	No	Amount	Length in m	Amount	
	<b>SUPPLY CHANNEL</b>											
1	Emapair Tank									6800	18.09	18.09
2	Ulagankathan Tank									1500	0.79	0.79
3	<u>Pasunkayamangalam Tank</u>									2200	17.14	17.14
4	<u>Nallathur Tank</u>									2200	10.68	10.68
5	Malaikottalam Tank									1400	8.46	8.46
	<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>14100.00</b>	<b>55.16</b>	<b>55.16</b>

1. In Emapair Tank provisions made for Desilting the supply channel and Retaining wall for 100m.
2. In Ulagankathan Tank provisions made for Desilting the supply channel.
3. In Pasungayamangalam Tank provisions made for Desilting the supply channel and Retaining wall for 100m
4. In Nallathur Tank provisions made for Desilting the supply channel and Retaining wall for 80m.
5. In Malaikottalam Tank provisions made for Desilting the supply channel and Retaining wall for 50m.
6. Bed Bars are provided for all supply channels at every 200m intervals.

Sl.No	Name of Anicut/Supply Channel	Flood Bank		Repairs to Anicut		Repairs to Head Sluice		Shutter Replacing		Supply Channel		Total
		Length	Amount	No	Amount	No	Amount	No	Amount	Length in m	Amount	
	<b>ANICUT</b>											
1	Kallakurichi Anicut			1	13.28							13.28
2	Thenkeeranur Anicut			1	8.11			1	0.58			8.69
3	Neelamangalam Anicut			1	4.99			1	0.18			5.17
4	Kurur Anicut							1	1.06			1.06
5	Porasakurichi Anicut	800	5.17	1	7.48			1	0.36			13.01
6	Virugavur Anicut			1	5.57			1	0.55			6.12
7	Nagalur Anicut	800	5.17	1	7.50			1	0.36			13.03
8	Velakurichi Anicut	800	5.44	1	3.91			1	0.23			9.58
9	Elavadi Anicut					1	10.55					10.55
10	Maravanantham Anicut					1	10.34					10.34
11	Sirumangalam Anicut					1	10.35					10.35
12	Vepudiyanthangal Anicut					1	10.38					10.38
13	Perumangalam Anicut					1	10.34					10.34
14	Siruvathur Anicut					1	10.40					10.40
15	Varathappanur Anicut					1	10.46					10.46
16	Kaniyamoor Anicut					1	10.22					10.22
17	Pethanur Anicut					1	6.34					6.34
18	Ulagiyanallur Anicut					1	10.46					10.46
	<b>C/O</b>	<b>2400.00</b>	<b>15.79</b>	<b>7.00</b>	<b>50.83</b>	<b>10.00</b>	<b>99.84</b>	<b>7.00</b>	<b>3.31</b>	<b>0.00</b>	<b>0.00</b>	<b>169.77</b>

Sl.No	Name of Anicut/Supply Channel	Flood Bank		Repairs to Anicut		Repairs to Head Sluice		Shutter Replacing		Supply Channel		Total
		Length	Amount	No	Amount	No	Amount	No	Amount	Length	Amount	
	<b>B/F</b>	<b>2400.00</b>	<b>15.79</b>	<b>7.00</b>	<b>50.83</b>	<b>10.00</b>	<b>99.84</b>	<b>7.00</b>	<b>3.31</b>	<b>0.00</b>	<b>0.00</b>	<b>169.77</b>
19	Selliyampalayam Anicut					1	7.68	1	0.66			8.34
20	Rayappanur Anicut					1	7.55					7.55
21	Thenponporappy Anicut					1	7.64					7.64
22	Poondi Anicut					1	7.61	1	0.66			8.27
23	Vasudevanur Anicut							1	1.07			1.07
24	Thottapadi Anicut					1	7.30	1	0.66			7.96
25	Anumanandal Anicut							1	0.66			0.66
26	Ninarpalayam Anicut	600	4.36									4.36
27	Sembakurichi Anicut					1	7.54	1	0.66			8.20
28	Maruthamalayan Anicut	600	5.76			1	7.52	1	0.66			13.94
29	Eriyur Anicut					1	7.53					7.53
30	Asakalathur Anicut	600	5.89			1	7.53					13.42
	<b>Total</b>	<b>4200.00</b>	<b>31.80</b>	<b>7.00</b>	<b>50.83</b>	<b>19.00</b>	<b>167.74</b>	<b>14.00</b>	<b>8.34</b>	<b>0.00</b>	<b>0.00</b>	<b>258.71</b>

### **Flood Bank**

Flood banks for length of 300m are proposed in upstream of anicut on both side in 3 anicut and Flood banks for length of 400m are proposed in upstream of anicut on both side in 3 anicut

### **Repairs to anicut**

- Provision made for Retaining wall for length of 80m At U/S of kallakurichi Anicut,& 52m Retaining wall @U/S of Thenkeeranur Anicut.
- Length from 25m to 48 m Retaining wall @ offtake point of supply channel are proposed for 5 anicuts.
- Construction of head sluice are proposed for 18 anicut at offtake point of supply channel, and 1 Repairs to head sluice is proposed.
- Shutter Repairing for 14 anicut are proposed.

  
Nodal Officer

  
Superintending Engineer

Chief Engineer

**WRO COST TABLE**

**NAME OF THE SUB BASIN: GOMUKHI**

Sl.No.	Description of work	Quantity		Amount in Lakhs	Remarks
		Length	NO		
<b><u>1. Tank Component</u></b>					
1	Standardisation of tank Bund	17890		130.40	
2	Desilting of Supply Channel	14100.00		55.16	
3	Repairs to Sluice		2	4.11	
4	Reconstruction of Sluice		12	46.45	
5	Desilting of field channel	3300		0.26	
6	Repairs to Weir		10	71.83	
7	Repairs to Culvert		1	4.34	
	<b>Sub Total</b>			312.54	
<b><u>1. Non Tank Component</u></b>					
1	Improvements to Flood Bank	4200.00		31.70	
2	Anicut Repairs		7.00	50.83	
3	Improvements to Shutter - Repairs (Head Sluice)		19.00	167.74	
4	Providing Shutter - New		14.00	8.34	
	<b>Sub Total</b>			258.71	
	<b>Grand Total</b>			571.25	
	Provision for Advertisement charges, Documentation charges, Photographic Charges, Name board Charges, PS Charges and contingences Charges @ 2.5%			14.40	
	Provision for Labour welfare @ 0.3%			1.82	
	<b>Total</b>			587.47	

*[Signature]*  
Assistant Engineer,  
P.W.D., W.R.O.,  
Irrigation Section,  
Kallakurichi-606202.

*[Signature]*  
ASSISTANT EXECUTIVE ENGINEER  
WATER RESOURCES ORGANISATION P W D  
VELLAR BASIN SUB DIVISION  
KALLAKURICHI - 606 202

*[Signature]*  
Executive Engineer P.W.D./W.R.O.  
Vellar Basin Division, Vriddhachalam.

*[Signature]*  
Superintending Engineer, P.W.D., W.R.O.,  
Vellar Basin Circle,  
Cuddalore - 607 001.

*[Signature]*  
CHIEF ENGINEER, P.W.D., W.R.O.  
CHENNAI REGION. CHENNAI-5

MJ  
9/11

**REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM  
SUB BASINS UTILISING THE SAVINGS - PHASE – III  
PACKAGE NO - I**

Sl.No	Name of tank	Amount in Lakhs
	<b><u>Tank Component</u></b>	
1	Emapair Tank	57.25
2	Thenkeeranur Large Tank	21.94
3	Neelamangalam Tank	35.13
4	Ulagamkathan Tank	9.83
5	<u>Pasunkayamangalam Tank supply channel</u>	17.14
6	<u>Nallathur Tank Supply Channel</u>	10.68
	<b><u>Non Tank Component</u></b>	
1	Kallakurichi Anicut	13.28
2	Thenkeeranur Anicut	8.69
3	Neelamangalam Anicut	5.17
4	Kurur Anicut	1.06
5	Porasakurichi Anicut	13.01
6	Virugavur Anicut	6.12
7	Nagalur Anicut	13.03
8	Velakurichi Anicut	9.58
	<b>Total</b>	<b>221.91</b>
	Provision for Advertisement charges, Documentation charges, Photographic Charges, Name board Charges, PS Charges and contingences Charges @ 2.5%	5.54
	Provision for Labour welfare @ 0.3%	0.66
	<b>GRAND TOTAL</b>	<b>228.11</b>

**REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM  
SUB BASINS UTILISING THE SAVINGS - PHASE – III  
PACKAGE NO - II**

Sl.No	Description of works	Amount in Lakhs
	<b><u>Non Tank Component</u></b>	
1	Elavadi Anicut	10.55
2	Maravanatham Anicut	10.34
3	Sirumangalam Anicut	10.35
4	Vepudiyanthangal Anicut	10.38
5	Perumangalam Anicut	10.34
6	Siruvathur Anicut	10.40
7	Varathappanur Anicut	10.46
8	Kaniyamoor Anicut	10.22
9	Pethanur Anicut	6.34
10	Ulagiyanallur Anicut	10.46
	<b><u>Tank Component</u></b>	
1	Malaikottalam Tank	31.33
2	Ogaiyur Tank	19.44
3	Vanavaretti Tank	20.99
	<b>Total</b>	<b>171.59</b>
	Provision for Advertisement charges, Documentation charges, Photographic Charges, Name board Charges, PS Charges and contingences Charges @ 2.5%	4.32
	Provision for Labour welfare @ 0.3%	0.54
	<b>GRAND TOTAL</b>	<b>176.45</b>

**REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM  
SUB BASINS UTILISING THE SAVINGS - PHASE – III  
PACKAGE NO - III**

Sl.No	Name of tank	Amount in Lakhs
	<b><u>Tank Component</u></b>	
1	Vadakkanandal Large Tank	24.78
2	<u>Paithanthurai Tank</u>	16.17
3	Elavadi Tank	21.36
4	Siruvathur Large Tank	16.78
5	Siruvathur Chitteri	9.73
	<b><u>Non Tank Component</u></b>	
1	Selliyampalayam Anicut	8.34
2	Rayappanur Anicut	7.55
3	Thenponporappy Anicut	7.64
4	Poondi Anicut	8.27
5	Vasudevanur Anicut	1.07
6	Tottapadi Anicut	7.96
7	Anumanandal Anicut	0.66
8	Ninarpalayam Anicut	4.36
9	Sembakurichi Anicut	8.19
10	Maruthamalayan Anicut	13.94
11	Eriyur Anicut	7.53
12	Asakalathur Anicut	13.42
	<b>Total</b>	<b>177.75</b>
	Provision for Advertisement charges, Documentation charges, Photographic Charges, Name board Charges, PS Charges and contingences Charges @ 2.5%	4.54
	Provision for Labour welfare @ 0.3%	0.62
	<b>GRAND TOTAL</b>	<b>182.91</b>

## Gomukhi Nadhi Sub Basin

### GENERAL ABSTRACT

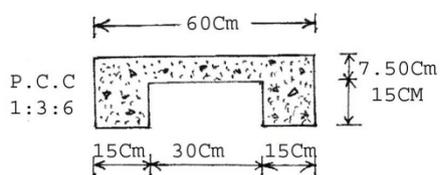
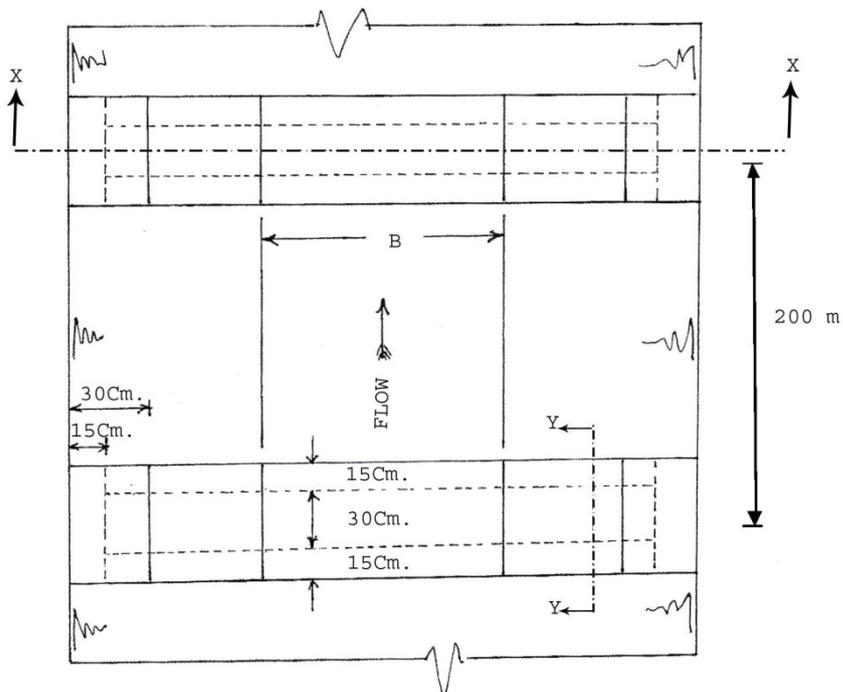
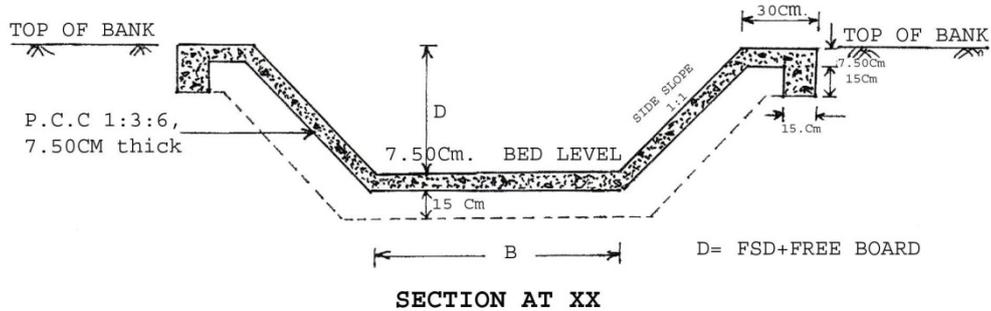
Sl. No.	Package Nos.	Name of the Package	Package Amount in Lakhs.
1	PACKAGE NO.I IAMWARM/WRD/ GMN/ LEFT OUT WORKS/ III	REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM SUB BASINS UTILISING THE SAVINGS - PHASE – III	228.11
2	PACKAGE NO.II IAMWARM/WRD/ GMN/ LEFT OUT WORKS/ III	REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM SUB BASINS UTILISING THE SAVINGS - PHASE – III	176.45
3	PACKAGE NO.III IAMWARM/WRD/ GMN/ LEFT OUT WORKS/ III	REHABILITATION OF LEFT OUT INFRASTRUCTURES IN IAMWARM SUB BASINS UTILISING THE SAVINGS - PHASE – III	182.91
		<b>GRAND TOTAL</b>	<b>587.47</b>

  
Assistant Engineer,  
P.W.D., W.R.O.,  
Irrigation Section,  
Kallakurichi-606202.

  
ASSISTANT EXECUTIVE ENGINEER  
WATER RESOURCES ORGANISATION P W D  
VELLAR BASIN SUB DIVISION  
KALLAKURICHI - 606 202

  
Executive Engineer P.W.D./W.R.O.  
Vellar Basin Division, Vriddhachalam.

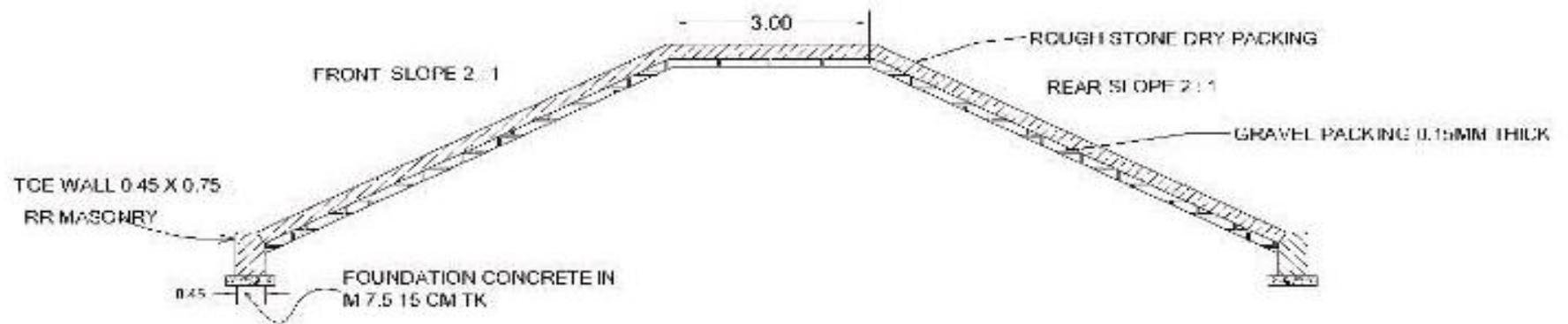
  
Superintending Engineer, P.W.D., W.R.O.,  
Vellar Basin Circle,  
Cuddalore - 607 001.



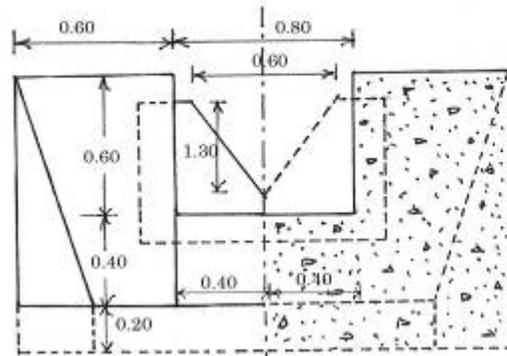
TN IAMWARM PROJECT - PHASE -III  
GOMUKHI SUB BASIN  
TYPICAL SKETCH OF BED BAR /  
MODEL SECTION FOR  
SUPPLY CHANNELS  
SCALE:- NOT TO SCALE

Ref :- Guidelines by thiru.R.K.Malkothra W.B.Consultant

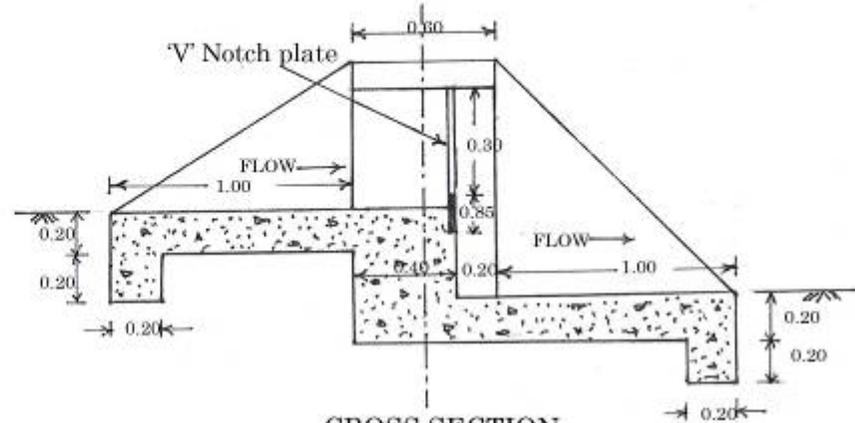
## CONSTRUCTION OF MODEL SECTION IN TANK



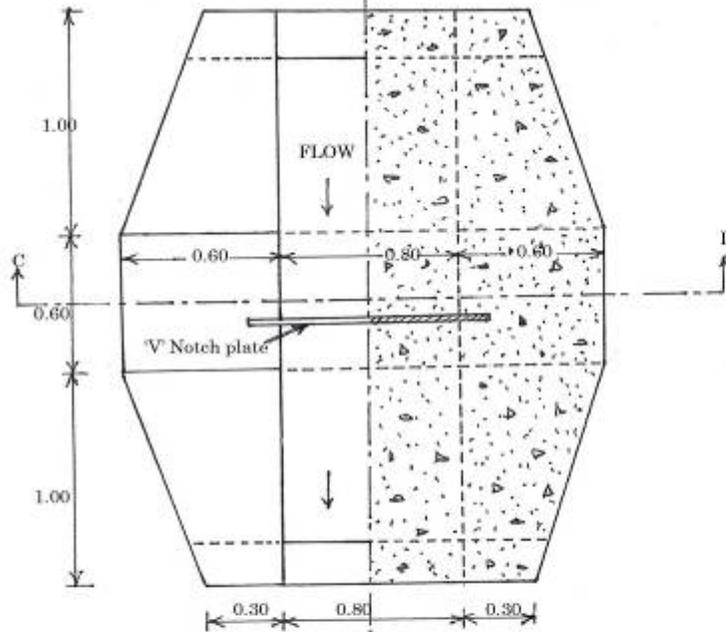
\* All Dimensions are in Meters  
Scale 1:10



HALF FRONT ELEVATION AND HALF SECTIONAL ELEVATION AT 'CD'



CROSS SECTION



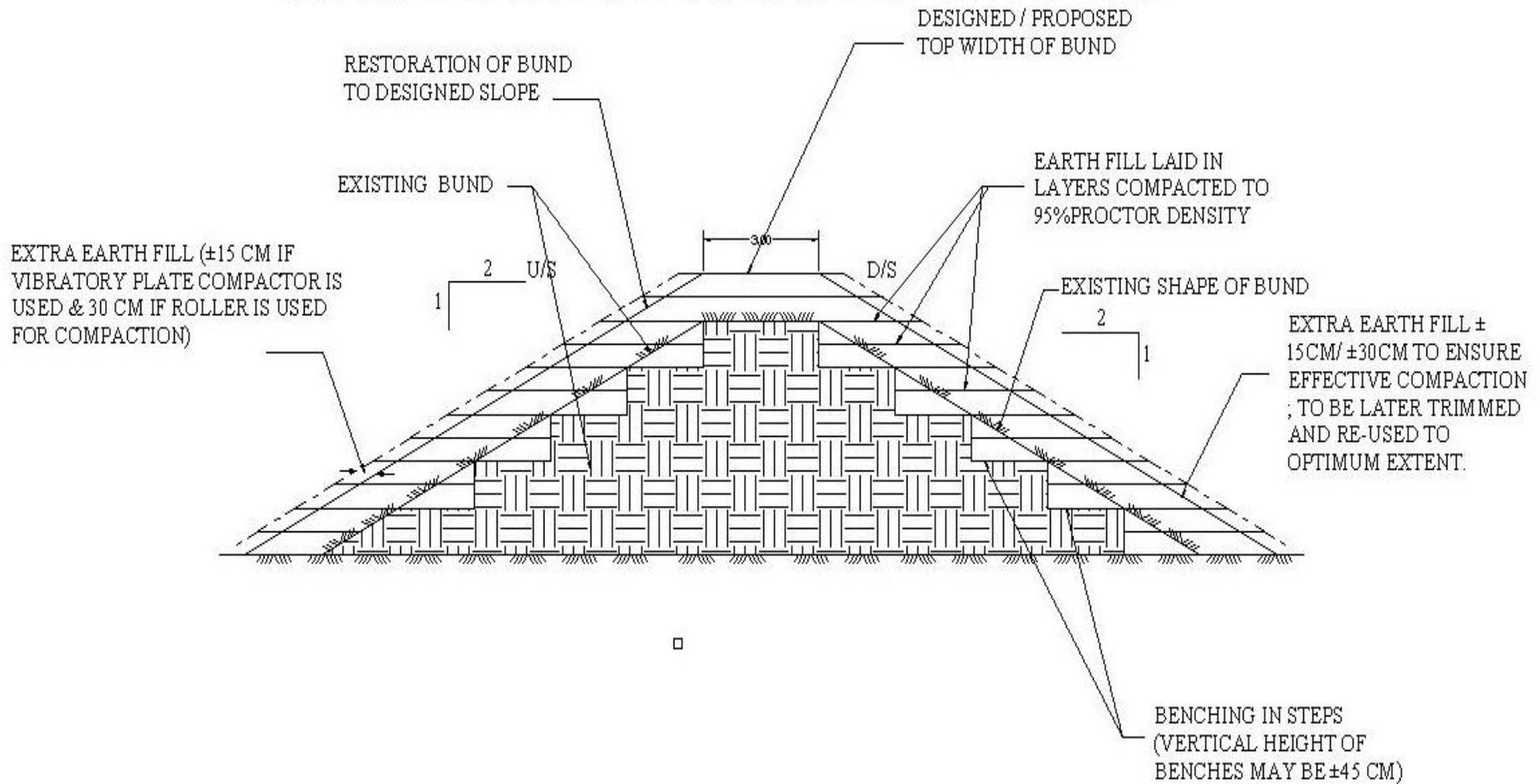
HALF PLAN AT TOP AND HALF PLAN AT BOTTOM

'V' -NOTCH - SALIENT DETAILS (For 1 to 4 C/s )

Discharge		Head Over Crest Cm	V' Notch size Cm	Overall size Cm
Cusec	Litre / sec			
1	28.3	20.5	25 x 50	50 x 65
2	56.6	27	30 x 60	50 x 75
3	85	32	35 x 70	55 x 90
4	113.27	36	42 x 84	60 x 100

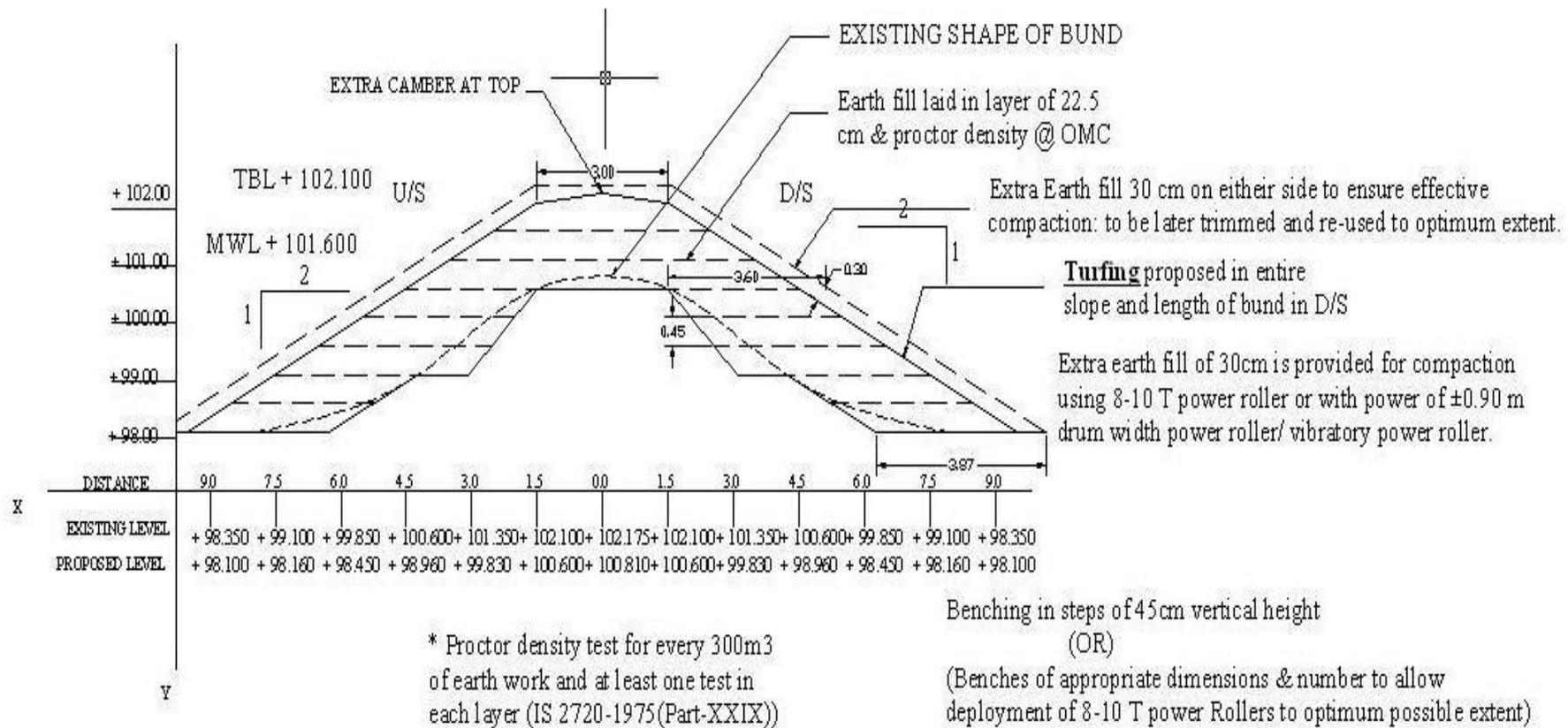
IAMWARM PROJECT - PHASE III  
GOMUKHINADHI SUB BASIN  
PROVIDING FLOW MEASURING  
DEVICE ('V' NOTCH) IN THE FIELD  
CHANNEL OF TANK SLUICE  
Scale :- 1cm = 0.25m  
All dimension are in 'Metre'

# RAISING & STRENGTHENING OF TANK BUND



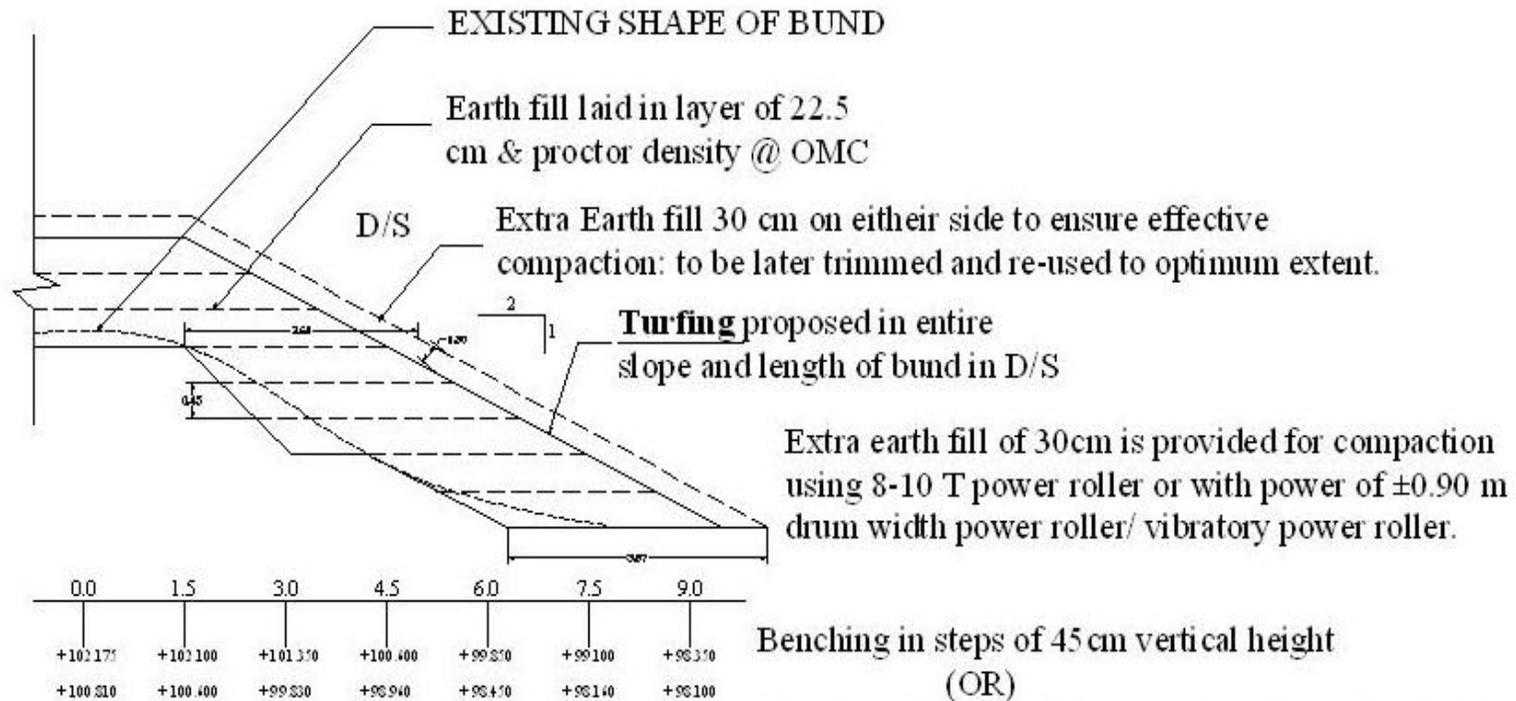
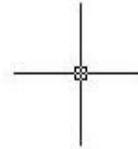
ALL DIMENSIONS ARE IN METER

## METHODOLOGY OF RAISING & STRENGTHENING OF TANK BUND



ALL DIMENSIONS & LEVELS ARE IN METERS

METHODOLOGY OF RAISING &  
STRENGTHENING OF TANK BUND



\* Proctor density test for every 300m<sup>3</sup> of earth work and at least one test in each layer (IS 2720-1975 (Part-XXIX))

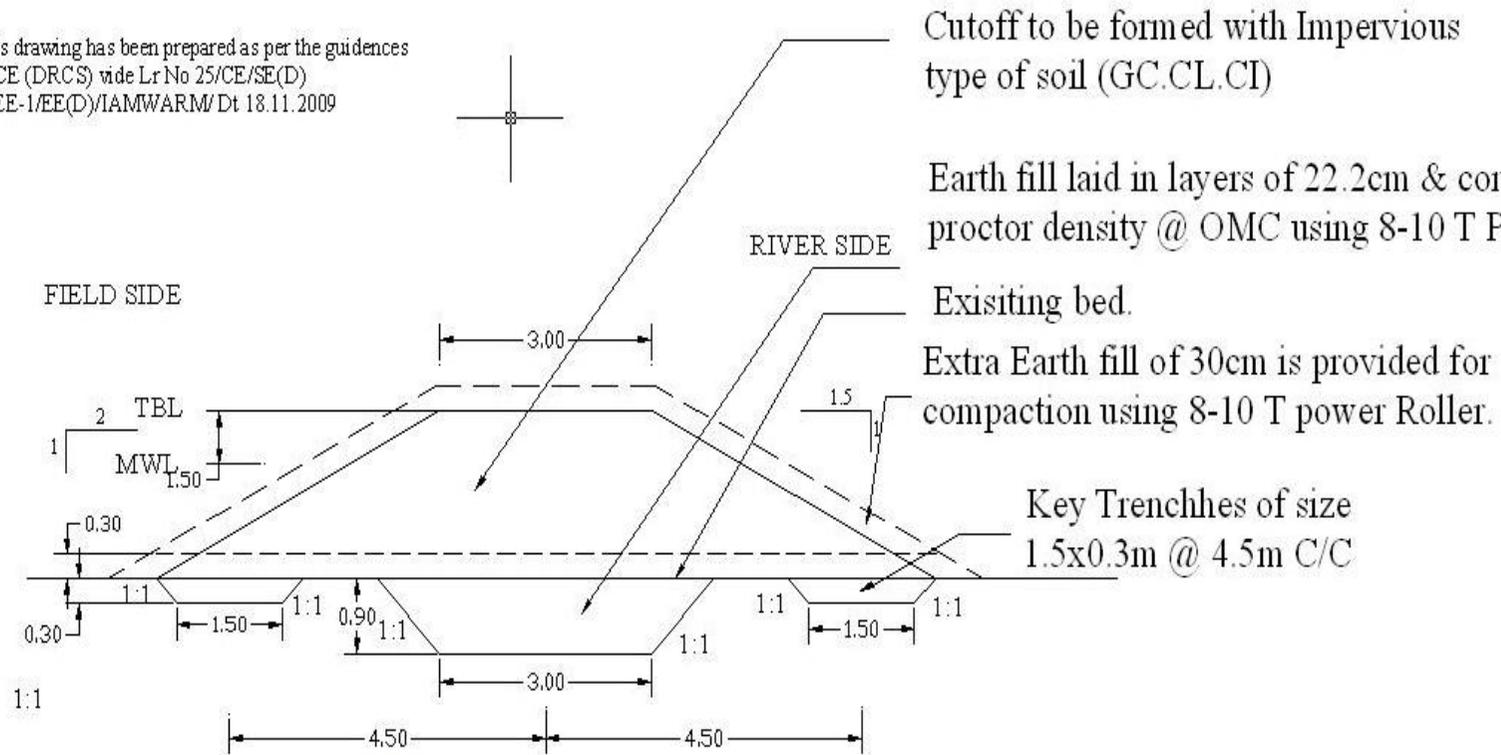
Benching in steps of 45 cm vertical height  
(OR)  
(Benches of appropriate dimensions & number to allow deployment of 8-10 T power Rollers to optimum possible extent)

**ENLARGED (PART SECTION)**

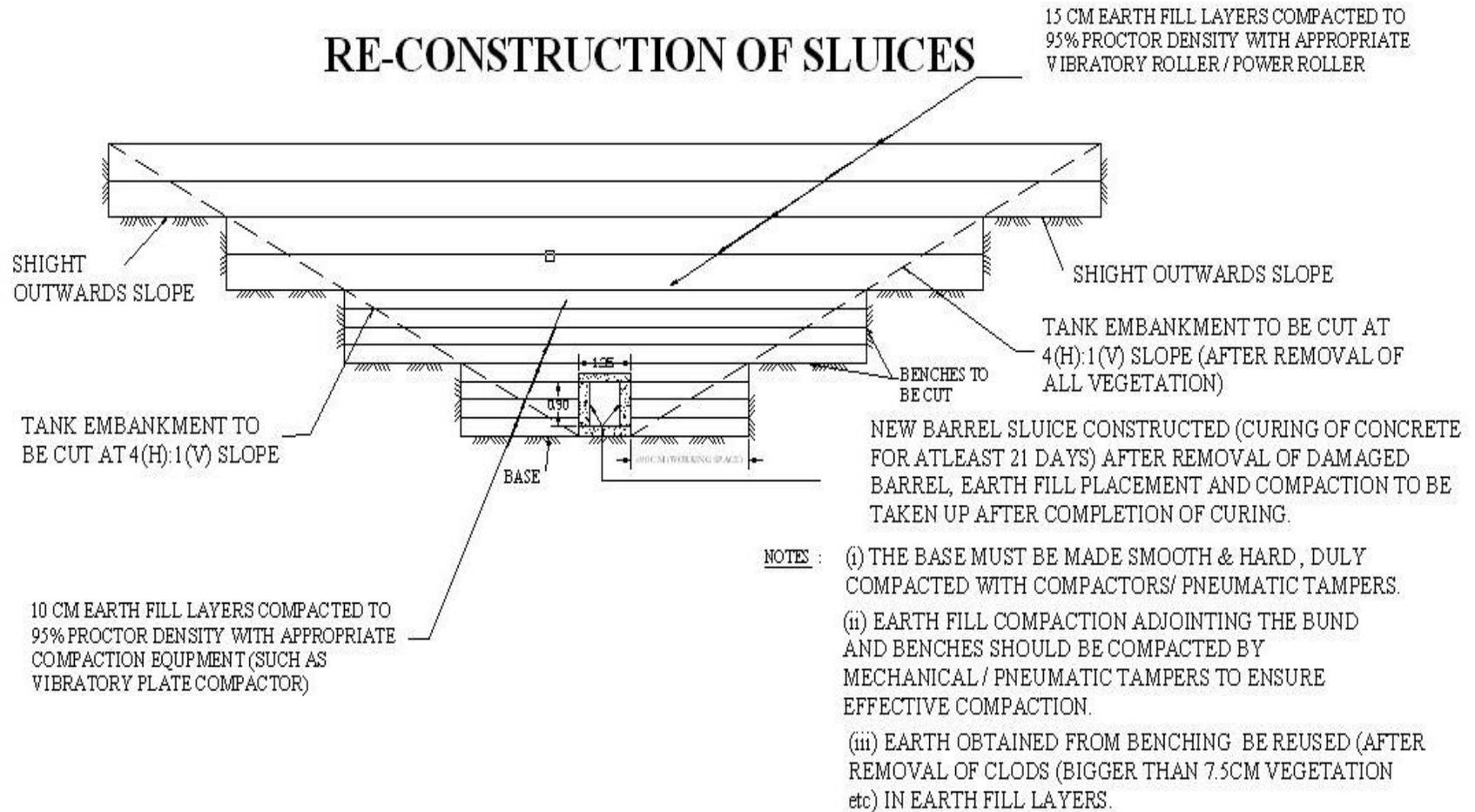
ALL DIMENSIONS & LEVELS ARE IN METERS

## TYPICAL CROSS SECTION OF FORMATION OF FLOOD BANK (Homogenous Section)

This drawing has been prepared as per the guidences of CE (DRC S) vide Lr No 25/CE/SE(D) /AEE-1/EE(D)/IAMWARM/Dt 18.11.2009

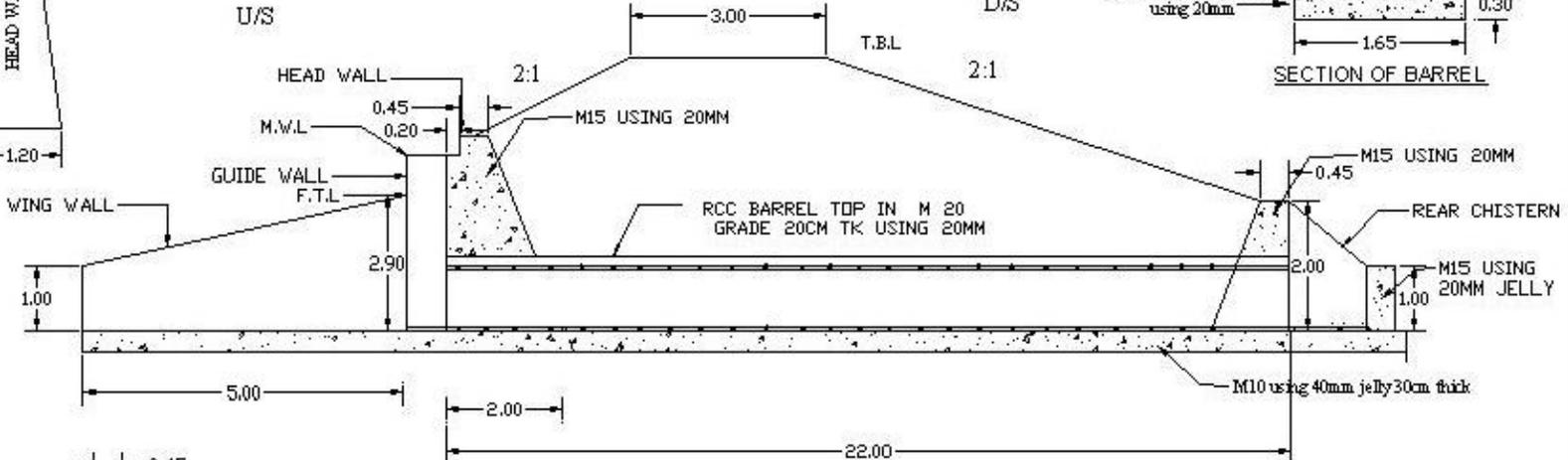
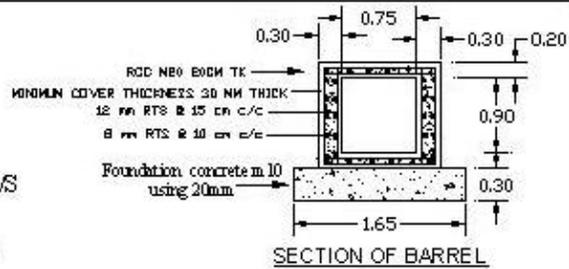


# RE-CONSTRUCTION OF SLUICES

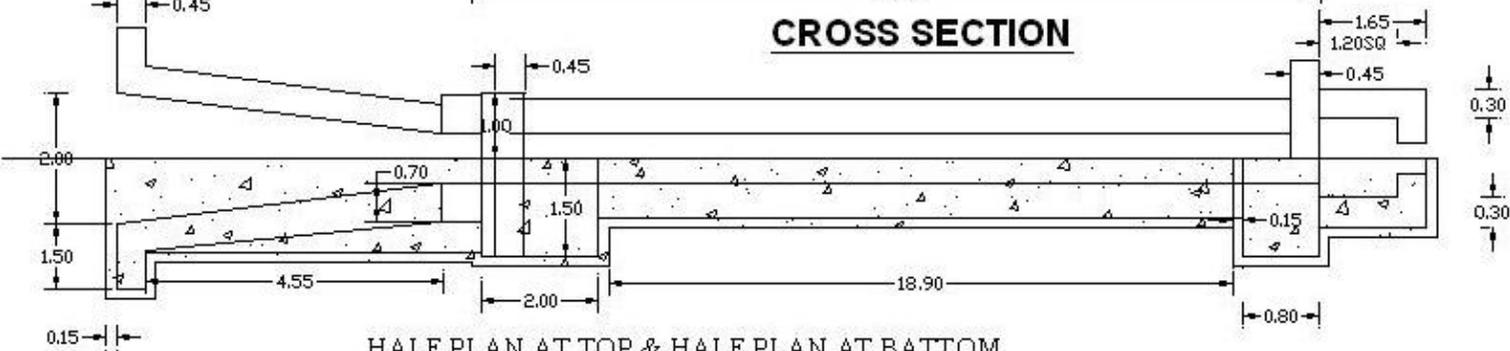


ALL DIMENSIONS ARE IN METER

**TYPICAL SECTION**

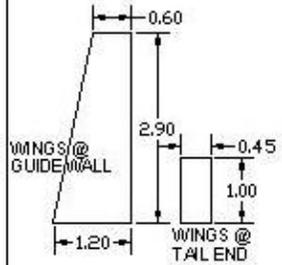


**CROSS SECTION**



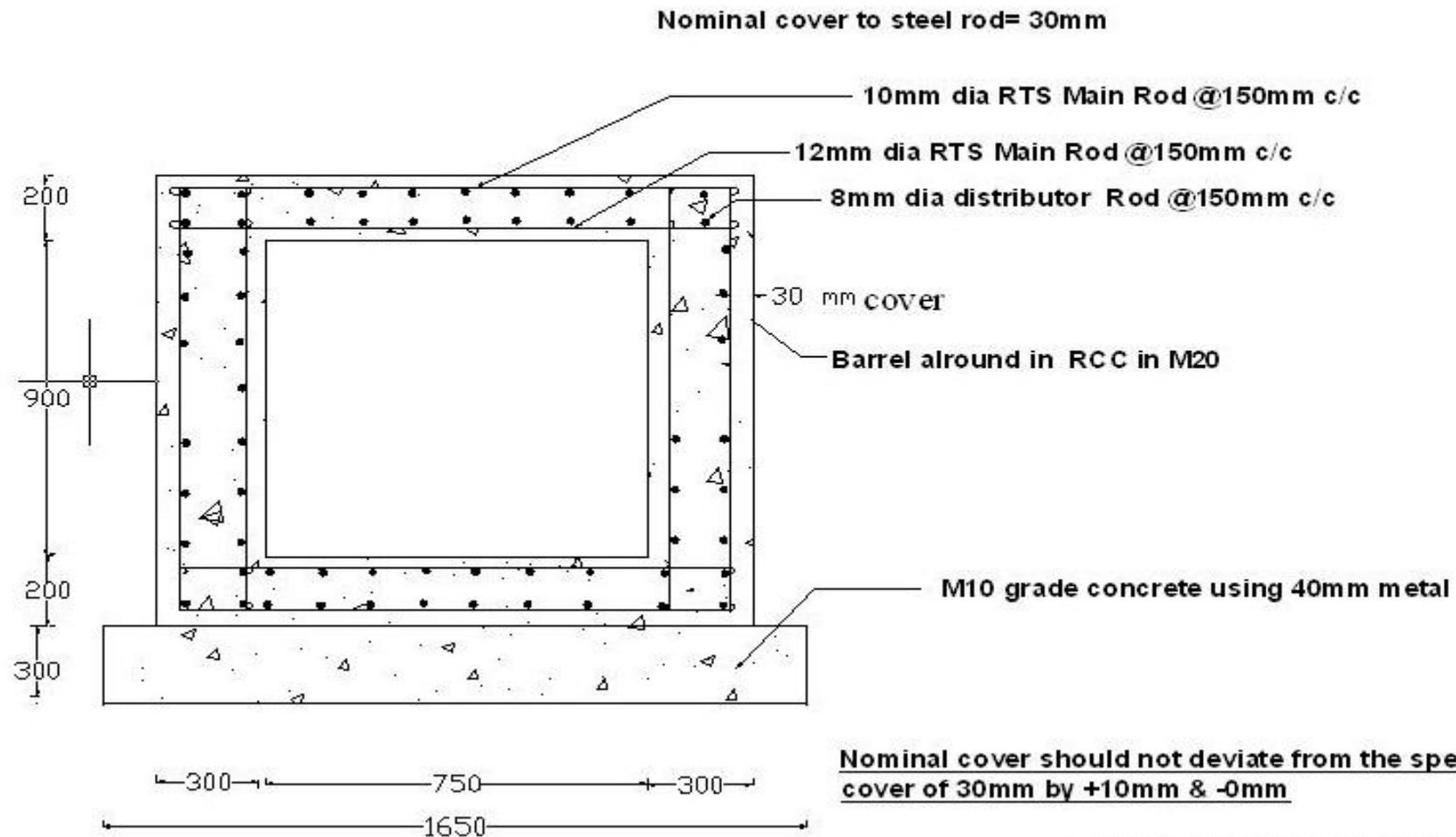
HALF PLAN AT TOP & HALF PLAN AT BOTTOM

Certified that the reconstruction work is done as per the existing hydraulic particulars.

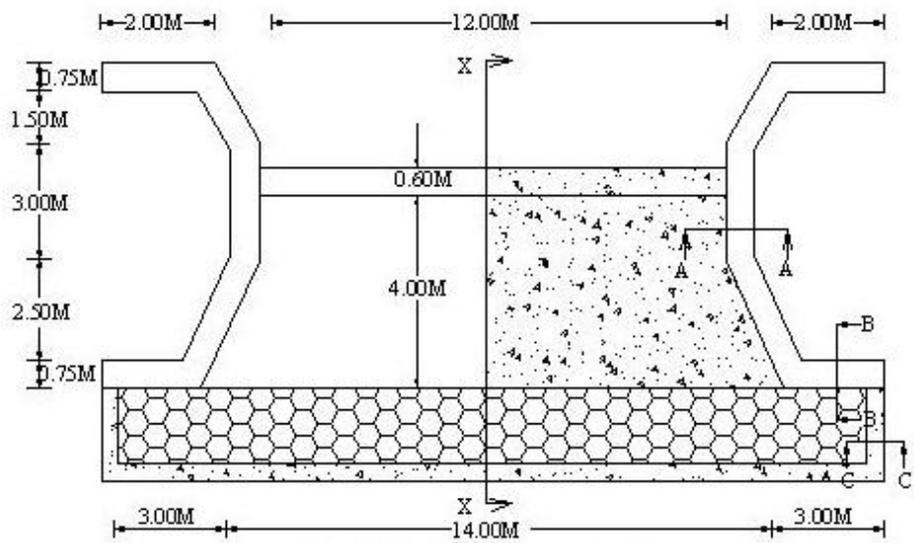


NAME OF WORK:  
RE CONSTRUCTION OF WING WALL SLUICE SLUICE  
ALL DIMENSIONS ARE IN METER

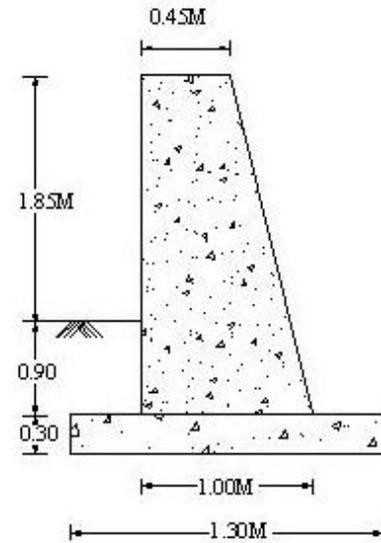
## TYPICAL CROSS SECTION OF SLUICE BARREL



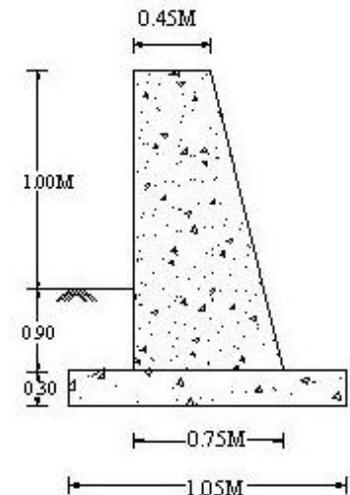
ALL DIMENSIONS ARE IN METER



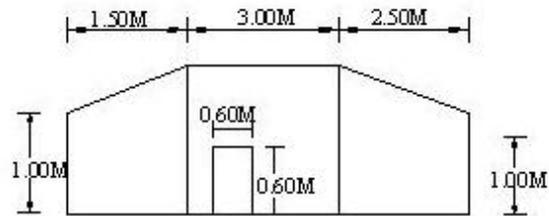
Weir Half plan at top and bottom



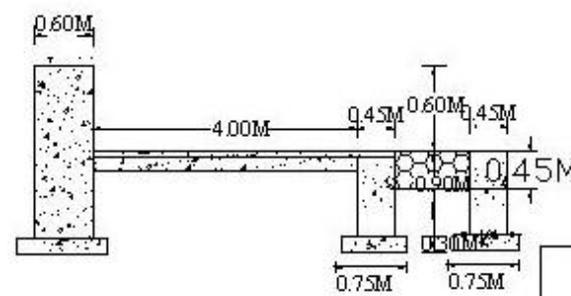
Abutment C/S at "AA"



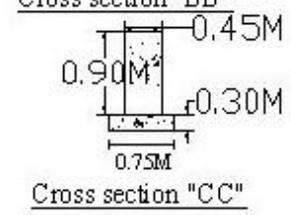
Cross section "BB"



Longitudinal section of abutment



Cross section of weir at "XX"



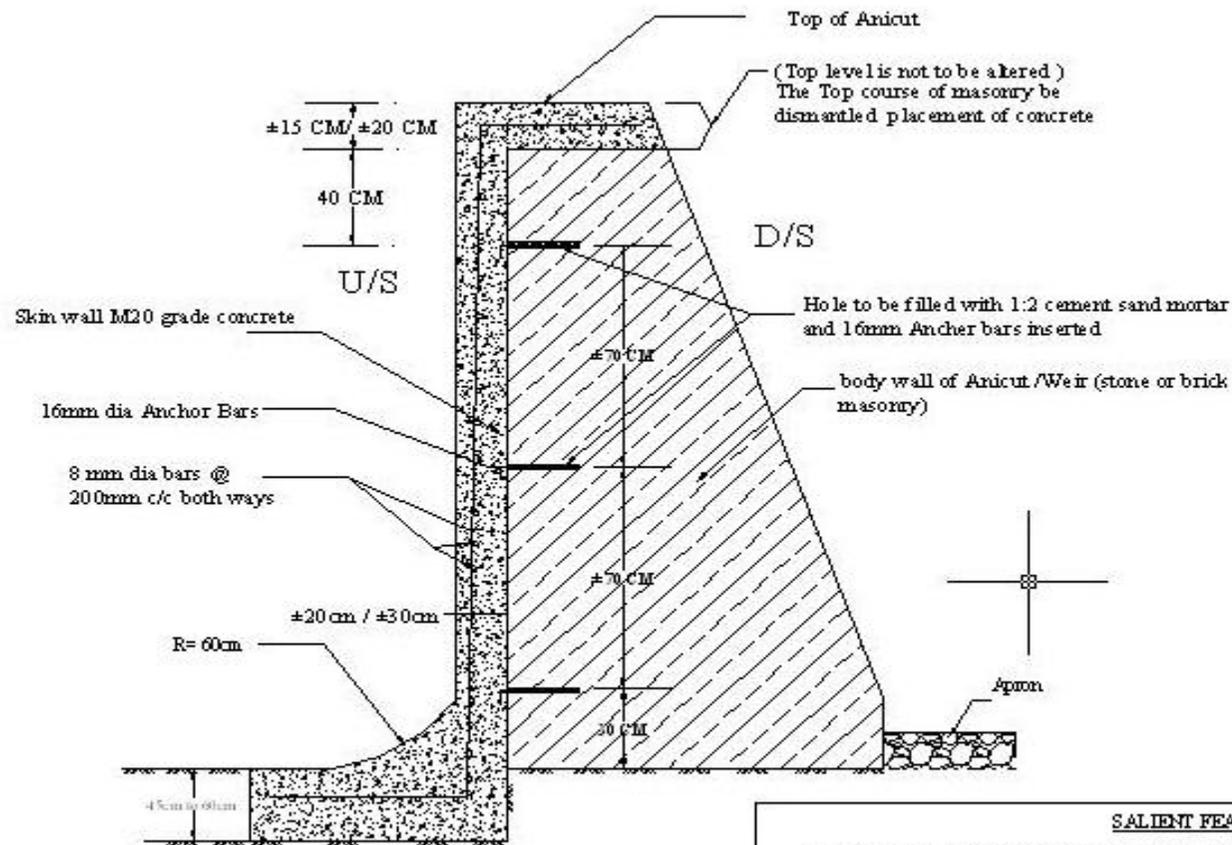
Cross section "CC"

REPAIRS TO WEIR

ALL DIMENSIONS ARE IN METER

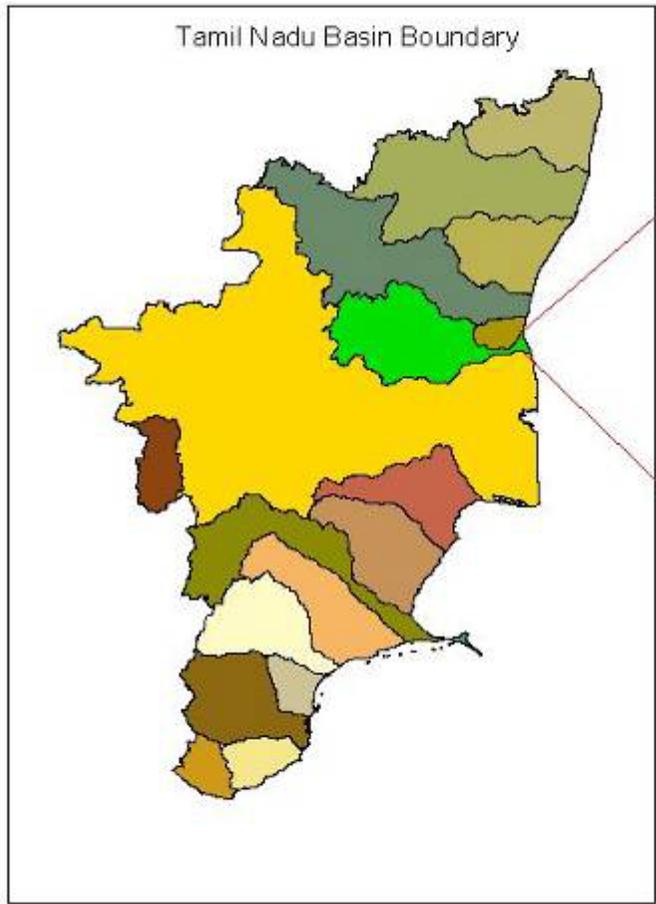
## TYPICAL SKETCH

### Rehabilitation of Anicut & Weirs through SKIN WALL Concrete

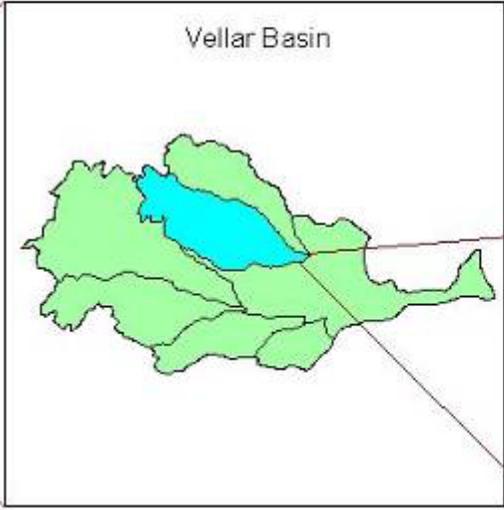


#### SALIENT FEATURES

- \* Joints on U/S surface to be taken to 25mm depth & surface Toughened by chipping.
- \* Drill holes of 50mm to be filled with 1:2 mortar and 16mm Anchor bars to be pushed in.
- \* The roughed surface to be left wet for 72 hours and cement slurry (1:2.5) of 0.70 water-cement ratio be applied over the surface prior to placement of skin concrete.
- \* concrete of M20 grade is to be used with 20mm maximum aggregate size.
- \* curing is to be done for 21 days.
- \* Thickness of skin concrete : 15cm at top & 20cm at bottom for Anicuts & weirs of height upto ±1.50m and 20cm at top & 30 cm at bottom for Anicuts of height more than ± 1.50m



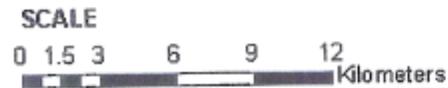
**GOMUKHI SUB BASIN (VELLAR BASIN)**  
**INDEX MAP**



# GOMUKINADHI SUB BASIN (VELLAR BASIN) VILLAGE MAP

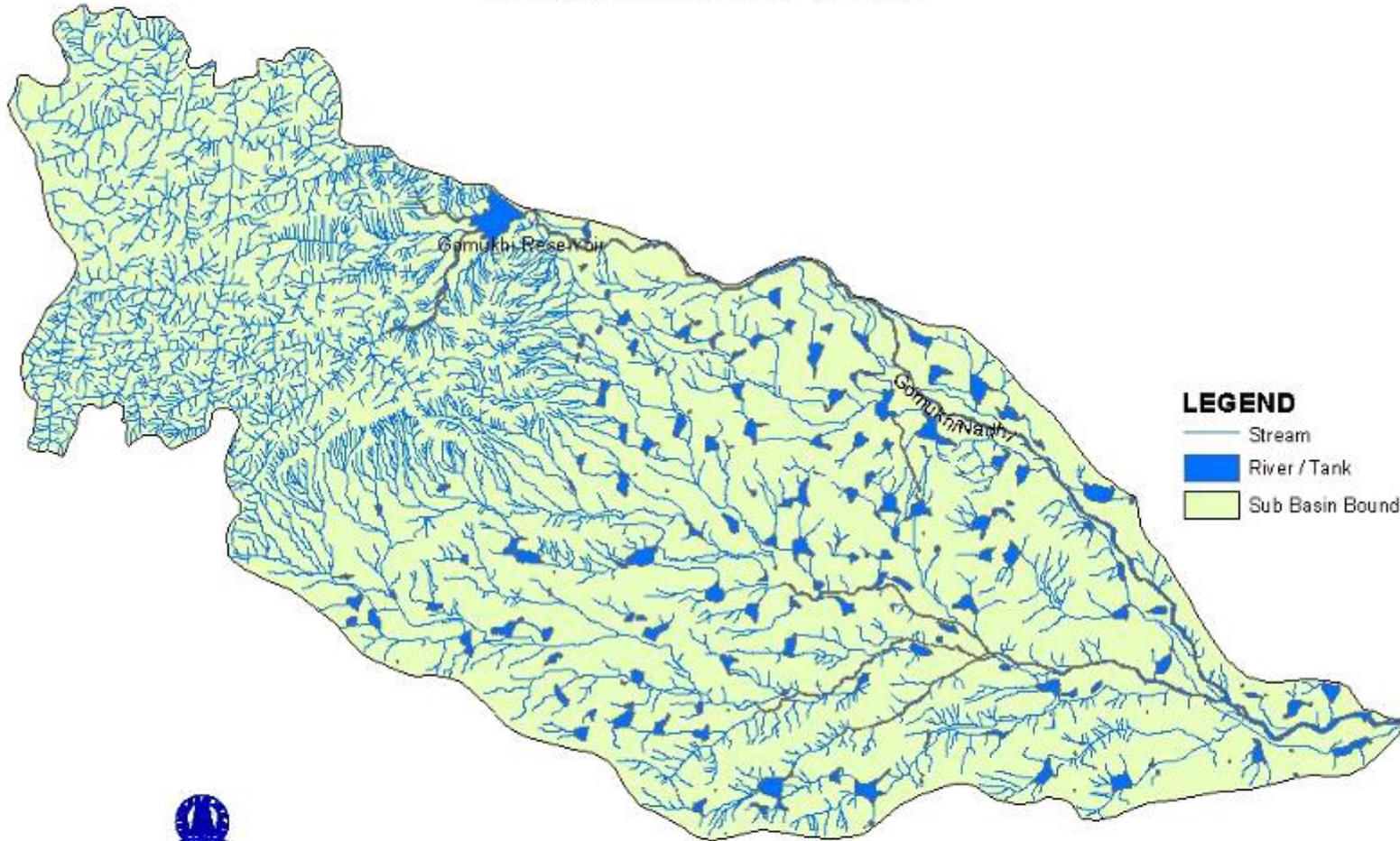


GOVERNMENT OF TAMIL NADU  
WATER RESOURCES ORGANISATION, PWD  
INSTITUTE FOR WATER STUDIES  
TAMIL NADU STATE CENTRE FOR REMOTE SENSING APPLICATION  
TIARAMANI, CHE NNAI-113



- LEGEND
- Village Boundary of Villupuram District
  - Village Boundary of Cuddalore District
  - Village Boundary of Salem District
  - Sub Basin Boundary

# GOMUKHI NADHI SUB BASIN (VELLAR BASIN) IRRIGATION SYSTEM MAP



## LEGEND

- Stream
- River / Tank
- Sub Basin Boundary



GOVERNMENT OF TAMIL NADU  
WATER RESOURCES ORGANISATION, PWD  
INSTITUTE FOR WATER STUDIES  
TAMIL NADU STATE CENTRE FOR REMOTE SENSING APPLICATION  
THARAMANI, CHENNAI - 113.

SCALE

