



**GOVERNMENT OF TAMILNADU**  
**PUBLIC WORKS DEPARTMENT**  
**WATER RESOURCES ORGANISTAION**  
**TRICHY REGION**

**NAME OF WORK : ADDITIONAL PROPOSALS FOR LINING OF  
FIELD CHANNELS AND FLOW MEASURING DEVICE IN  
PERAMBALUR DISTRICT**

**ESTIMATE AMOUNT: 93.57 Lakhs**

**CIRCLE : TRICHY**  
**DIVISION : ARIYALUR**  
**SUB DIVISION : PERAMBALUR**

## INDEX

SL NO	DESCRIPTION	PAGE
1	REPORT	1
2	FORMAT - I	2,3
3	FORMAT - II	4,5
4	INDEX MAP	6
5	SUB BASIN MAP	7
6	DRAWINGS	8,9,10

## **Additional proposals for providing Lining of Irrigation Channel and Flow Measuring Device in Chinnar Sub Basin (Phase II) under IAMWARM Project**

The lining of irrigation channel and installation of measuring device has been proposed for Phase I and II sub basins by utilizing the Project Savings as discussed with the World Bank, during the implementation support mission from Sept 12-20th 2011.

Accordingly in the Chinnar sub basin of Phase II the following works have been proposed,

1. Lining of irrigation channel below the tanks sluice using C.C. M 15 as per sketch enclosed
2. Installing flow measuring device in the irrigation channel as per sketch
3. L.S provision of 2.8 % for Provision of labour welfare @ 0.30 % and provision for contingencies, advertisement charges , photographic charges @ 2.5%

The package details are appended separately and works are proposed to be taken up under national shopping procedure

The total cost for the Additional DPR works out to Rs.93.57 lakhs

FORMAT- I

Name of Region Trichy  
 Name of Circle Middle Cauvery Basin Circle,Trichy.  
 Name of Division **Marudaiyaru Basin Division, Ariyalur.**  
 Name of Sub Basin **Chinnar**  
 Total Number of Tanks taken up under IAMWARM : **33 Nos**

<b>NO OF TANKS, SLUICES IN EACH PACKAGE</b>												
<b>TOTAL NO OF TANKS TAKEN UNDER IAMWARM : 33 Nos</b>										<b>Rs: 93.63 Lakhs</b>		
SI No	Package No	Name of Tank	No of Sluice	Flow Measuring Device		Lining the Field channel			Total Amount	L.S.Provision @2.80%	Grand Total	Remarks
				No	Amount	Type of soil BC/OS	Length in Metre	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Package-1	Ladapuram Big tank	2	2	0.20	OS	60	1.92	2.12	0.33	11.99	
		Ladapuram Small Tank	2	2	0.20	OS	60	1.92	2.12			
		Melapuliyur Tank	2	2	0.20	OS	60	1.92	2.12			
		Kalarampatti tank	3	3	0.30	OS	90	2.88	3.18			
		Kurumbalur Tank	2	2	0.20	OS	60	1.92	2.12			
		<b>Total</b>	<b>11</b>	<b>11</b>	<b>1.10</b>		<b>330</b>	<b>10.56</b>	<b>11.66</b>			
2	Package-2	Senjeri Tank	2	2	0.20	OS	60	1.92	2.12	0.33	11.99	
		Arananrai tank	2	2	0.20	OS	60	1.92	2.12			
		Perambalur Mela Eri	2	2	0.20	OS	60	1.92	2.12			
		Perambalur Keela Eri	2	2	0.20	OS	60	1.92	2.12			
		Thuraimangalam Big Tank	2	2	0.20	OS	60	1.92	2.12			
		Thuraimangalam Small Tank	1	1	0.10	OS	30	0.96	1.06			

		<b>Total</b>	<b>11</b>	<b>11</b>	<b>1.10</b>		<b>330</b>	<b>10.56</b>	<b>11.66</b>	<b>0.33</b>	<b>11.99</b>	
3	<b>Package-3</b>	Essanai Mathavanaianman Tank	2	2	0.20	OS	60	1.92	2.12	0.33	11.99	
		Esanai Tank	2	2	0.20	OS	60	1.92	2.12			
		Arasalur tank	1	1	0.10	OS	30	0.96	1.06			
		Annamangalam Tank	2	2	0.20	OS	60	1.92	2.12			
		Sengunam Tank	2	2	0.20	OS	60	1.92	2.12			
		Neikuppai Tank	2	2	0.20	BC	60	1.92	2.12			
		<b>Total</b>	<b>11</b>	<b>11</b>	<b>1.10</b>		<b>330</b>	<b>10.56</b>	<b>11.66</b>			
1	2	3	4	5	6	7	8	9	10	11	12	13
4	<b>Package-4</b>	Sathanavady Tank	1	1	0.10	BC	30	0.96	1.06	0.30	10.96	
		Thondapady Tank	1	1	0.10	BC	30	0.96	1.06			
		Chinnar tank	7	7	0.70	OS	245	7.84	8.54			
		<b>Total</b>	<b>9</b>	<b>9</b>	<b>0.90</b>		<b>305</b>	<b>9.76</b>	<b>10.66</b>			
5	<b>Package-5</b>	Chinnar tank	5	5	0.50	OS	150	4.80	5.30	0.29	10.47	
		Ogalur Tank	4	4	0.40	BC	140	4.48	4.88			
		<b>Total</b>	<b>9</b>	<b>9</b>	<b>0.90</b>		<b>290</b>	<b>9.28</b>	<b>10.18</b>			
6	<b>Package-6</b>	Ogalur Tank	5	5	0.50	BC	150	4.80	5.30	0.33	12.15	
		Vadakkalur tank	2	2	0.20	BC	60	1.92	2.12			
		Vadakkalur Agraharam Tank	3	3	0.30	BC	90	2.88	3.18			
		Kaiperalbalur Tank	1	1	0.10	BC	35	1.12	1.22			
		<b>Total</b>	<b>11</b>	<b>11</b>	<b>1.10</b>		<b>335</b>	<b>10.72</b>	<b>11.82</b>			
7	<b>Package-7</b>	Keelapuliyur Tank	3	3	0.30	BC	90	2.88	3.18	0.34	12.32	
		Elumur tank	4	4	0.40	BC	120	3.84	4.24			
		Aykudy tank	2	2	0.20	BC	60	1.92	2.12			
		Perumathur tank	1	1	0.10	BC	35	1.12	1.22			
		Kiliyur tank	1	1	0.10	BC	35	1.12	1.22			
		<b>Total</b>	<b>11</b>	<b>11</b>	<b>1.10</b>		<b>340</b>	<b>10.88</b>	<b>11.98</b>			

8	<b>Package-8</b>	Andikurumbalur Tank	2	2	0.20	BC	60	1.92	2.12		
		Vadakeri tank	3	3	0.30	BC	90	2.88	3.18		
		Kilumathur tank	3	3	0.30	BC	105	3.36	3.66		
		Vayalur Tank	2	2	0.20	BC	70	2.24	2.44		
		<b>Total</b>	<b>10</b>	<b>10</b>	<b>1.00</b>	BC	<b>325.00</b>	<b>10.40</b>	<b>11.40</b>		
	<b>TOTAL</b>	<b>83</b>	<b>83</b>	<b>8.30</b>		<b>2585.00</b>	<b>82.72</b>	<b>91.02</b>	<b>2.55</b>	<b>93.57</b>	

**Certified that the Tanks included in the originally approved in Chinnar Sub Basin DPR alone are considered now**

**Certified that the above works have not been taken up in any other Project**

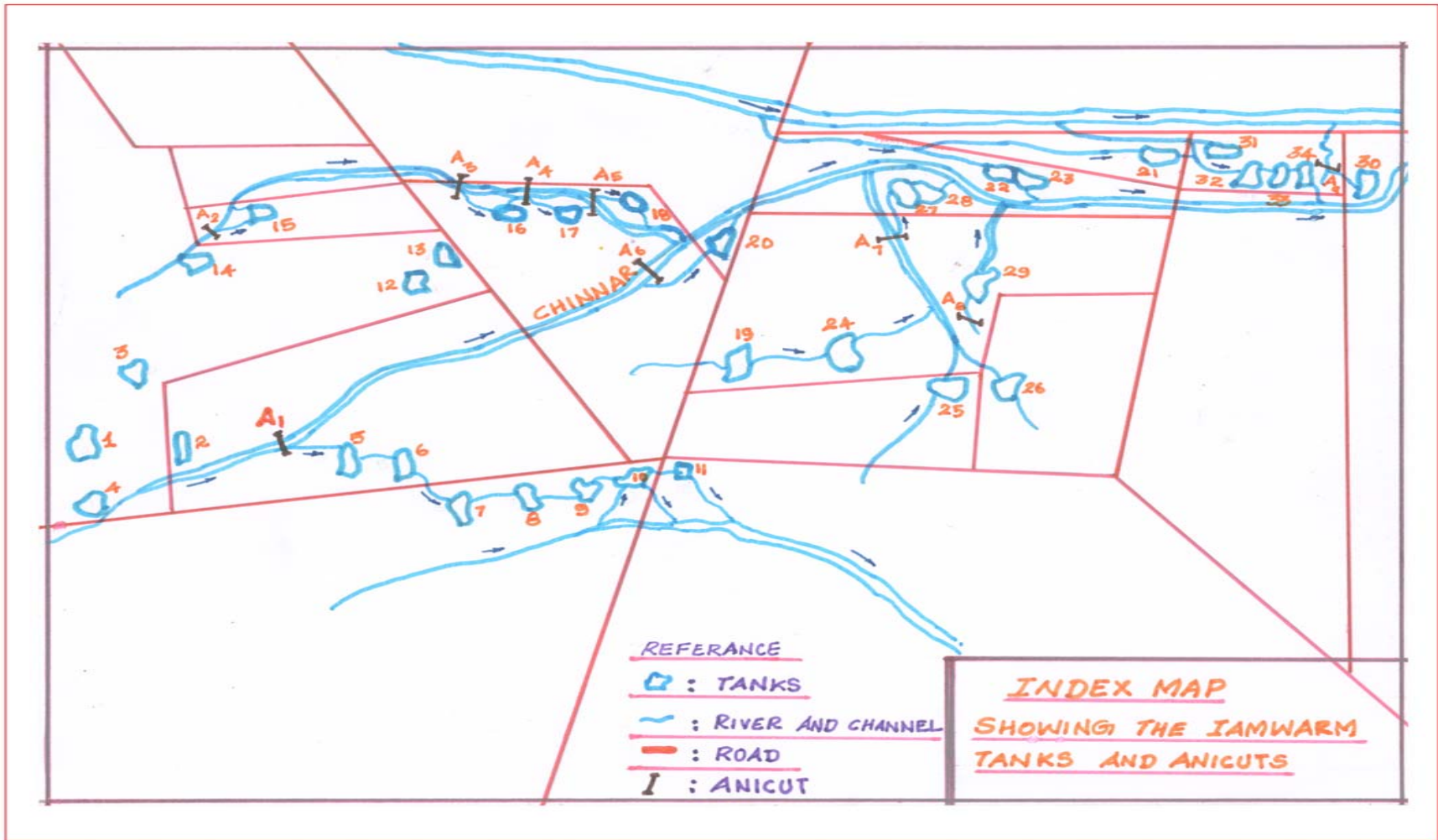
**Certified that the field / Irrigation Channel drawing type I is adopted in 16 number of tanks having soil other than block cotton soil**

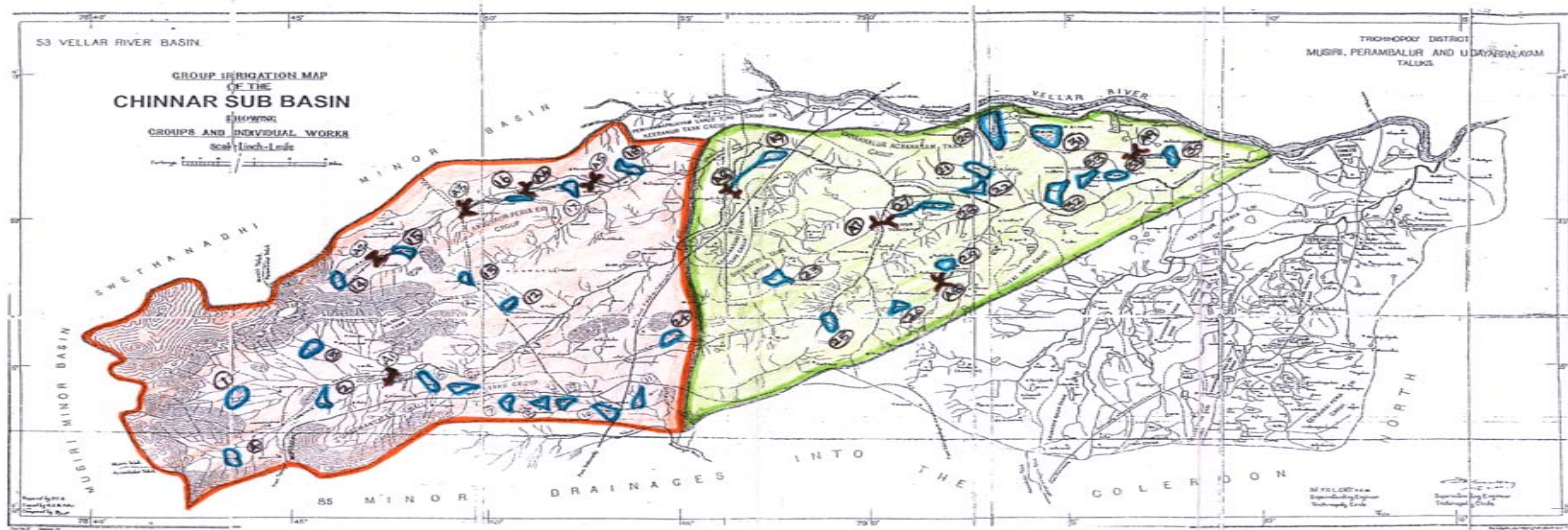
**Certified that the field / Irrigation Channel drawing type II is adopted in 17 number of tanks having block cotton soil**



4	AP_4/ IAMWARM/ CNR/WRO/ WORKS/ II / 2011-2012	Lining of head Irrigation Channel and providing Flow Measuring devices for Thondapady tank, Sathanavady tank and Chinnar Tank in Chinnar sub basin in Perambalur District	3	9	305	10.96	
5	AP_5/ IAMWARM/ CNR/WRO/ WORKS/ II / 2011-2012	Lining of head Irrigation Channel and providing Flow Measuring devices for Chinnar Tank and Ogalur tank in Chinnar sub basin in Perambalur District	2	9	290	10.47	
6	AP_6/ IAMWARM/ CNR/WRO/ WORKS/ II / 2011-2012	Lining of head Irrigation Channel and providing Flow Measuring devices for Ogalur tank, Vadakkalur tank, Vadakkalur agraharam tank and Kaiperalambalur tank in Chinnar sub basin in Perambalur District	4	11	335	12.15	
7	AP_7/ IAMWARM/ CNR/WRO/ WORKS/ II / 2011-2012	Lining of head Irrigation Channel and providing Flow Measuring devices for Keelapuliyur Tank, Elumur tank, Aykudi tank, Perumathur tank and Kiliyur Tank in Chinnar sub basin in Perambalur District	5	11	340	12.32	
8	AP_8/ IAMWARM/ CNR/WRO/ WORKS/ II / 2011-2012	Lining of head Irrigation Channel and providing Flow Measuring devices for Andikurumbalur tank, Vadekkeri tank, Kilumathur tank and Vayalur tank in Chinnar sub basin in Perambalur District	4	10	325	11.72	
		<b>TOTAL</b>	<b>33</b>	<b>83</b>	<b>2585</b>	<b>93.57</b>	





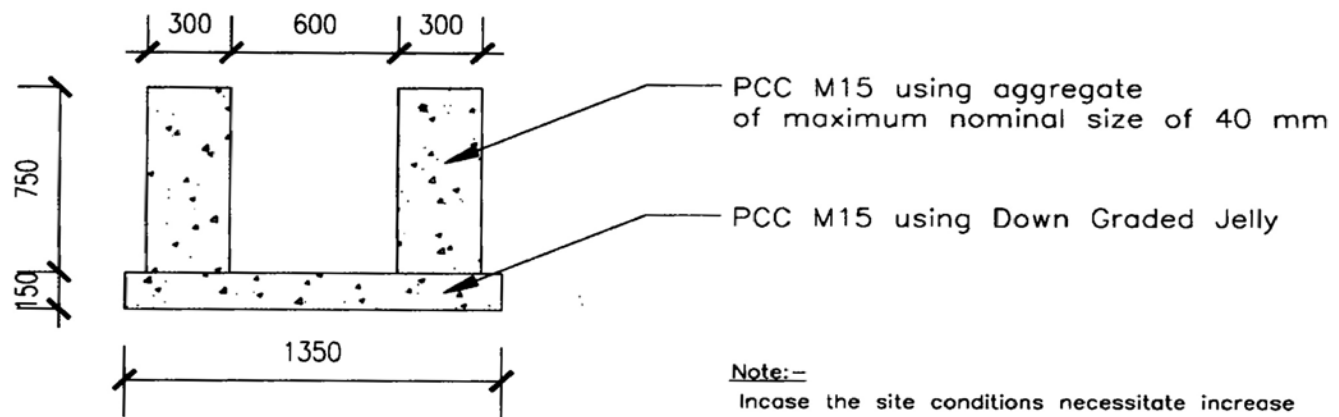


**Package - I**

**Package - II**

Package - I		Package - II	
Tank	Anicuts	Tank	Anicuts
1. Ladapuram Big Tank	A1 Kurumbalur Anicut	20. Chinnar Tank	A6 Chinnar Anicut
2. Ladapuram Small Tank	A2 Annamangalm Anicut	21. Ogalur Tank	A7 Kiliyur Perumathur Anicut
3. Melapuliyur Tank	A3 Thondapadi Anicut	22. Vadakalur Tank	A8 Paravai Odai Anicut
4. Kalarampatti Tank	A4 Neikuppai Anicut	23. Vadakalur Agraharam Tank	A9 Nari Odai Anicut
5. Kurumbalur Tank	A5 Sathanavadi Anicut	24. Kelapuliyur Tank	
6. Senjeri Tank		25. Elumur Tank	
7. Aranarai Tank		26. Ayikudi Tank	
8. Perambalur Mela Eri		27. Perumathur Tank	
9. Perambalur Keela Eri		28. Kiliyur Mela Eri	
10. Thuraimangalam Big Tank		29. Andikurumbalur Tank	
11. Thuraimangalam Small Tank		30. Keelaperambalur Vaddakeri Tank	
12. Madhavaniamman Tank		31. Athiyur Tank	
13. Easanai Tank		32. Kilumathur Tank	
14. Arasalur Tank		33. Kaiparambalur Tank	
15. Annamangalam Tank		34. Vayalur Tank	
16. Thondapadi Tank			
17. Neikuppai Tank			
18. Sathanavadi Tank			
19. Swnkunam Tank			

## TYPICAL CROSS SECTION OF LINED IRRIGATION CHANNEL

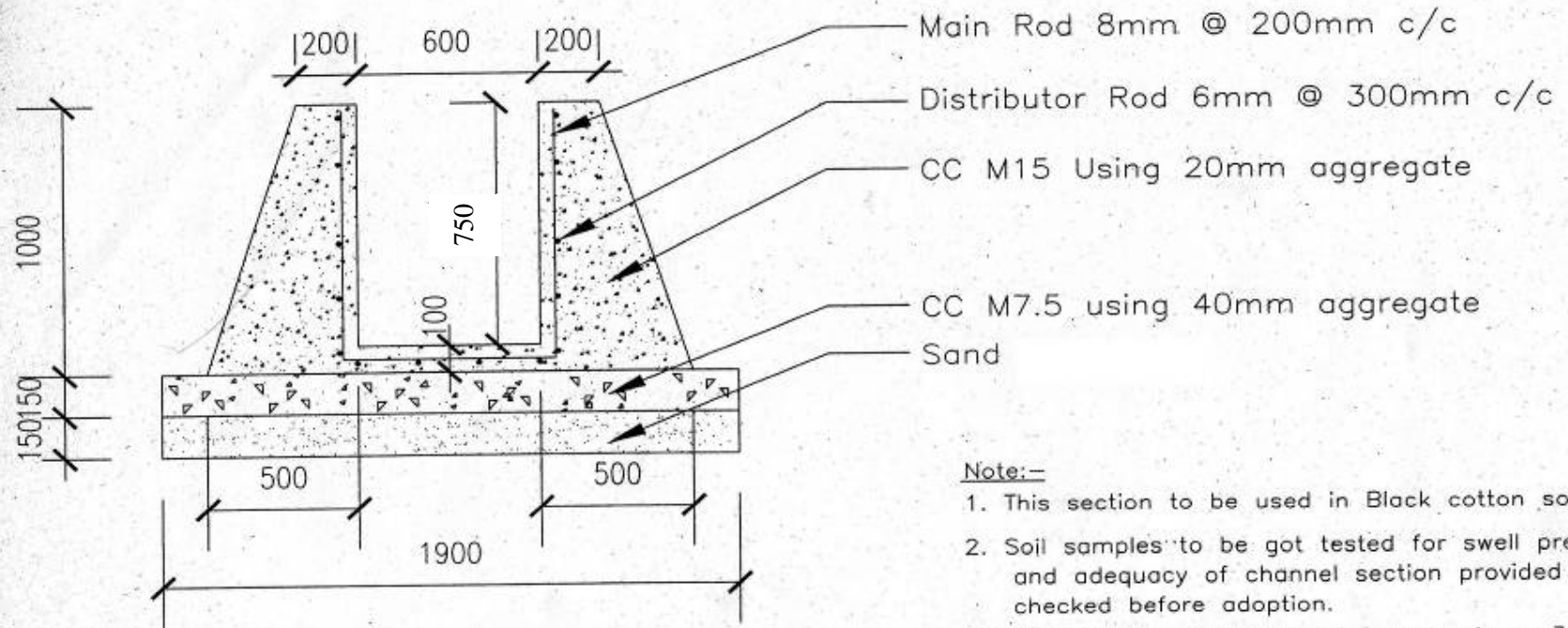


**Note:-**

Incase the site conditions necessitate increase the Channel section requisite modifications be made there-in duly ensuring the stability section

All Dimensions are in mm

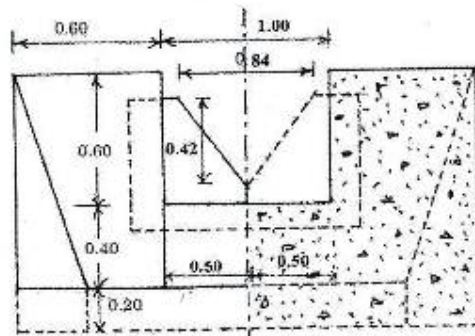
## LINING OF IRRIGATION CHANNEL TYPICAL CROSS SECTION FOR BLACK COTTON SOIL



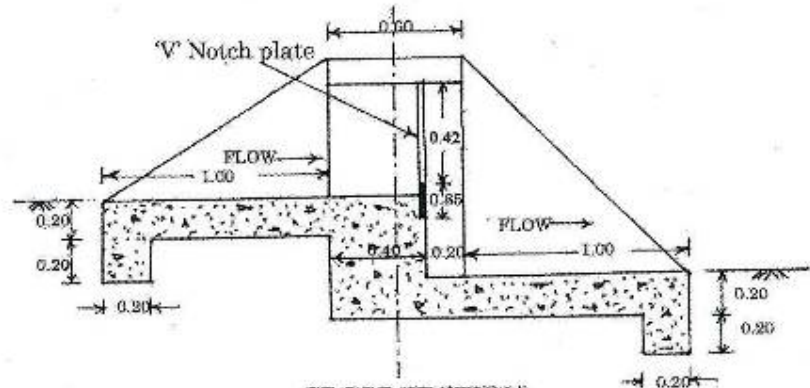
**Note:-**

1. This section to be used in Black cotton soil.
2. Soil samples to be got tested for swell pressure and adequacy of channel section provided to be checked before adoption.
3. Nominal cover to steel reinforcements = 30 mm

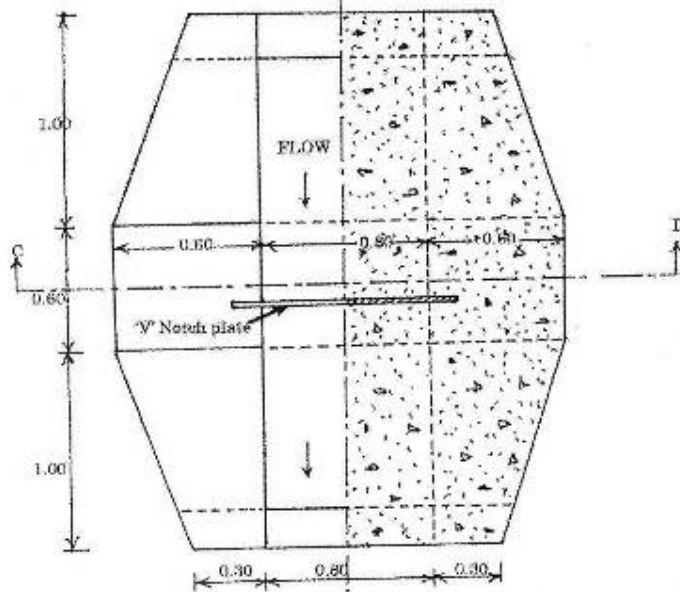
IAMWARM PROJECT  
 CHINNAR SUB BASIN  
 IRRIGATION CHANNEL LINING  
 Scale:- 1:1000  
 All Dimension are in Metre



HALF FRONT ELEVATION AND HALF SECTIONAL ELEVATION AT 'CD'



CROSS SECTION



HALF PLAN AT TOP AND HALF PLAN AT BOTTOM

TYPE - D  
4 CUSEC V-NOTCH

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  
CHINNAR SUB BASIN PROVIDING  
FLOW MEASURING DEVICE ('V'  
NOTCH) IN THE FIELD CHANNEL OF  
TANK SLUICE  
Scale 1cm=0.25m  
All dimension are in Metre