

Part A

Name of work: Model estimate for construction of Recharge well

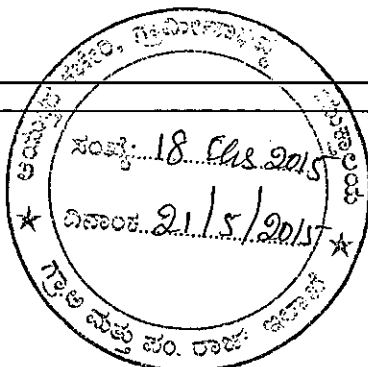
Financial Year : 2015-16

Head of Account = Mahatma Gandhi NREGS Karnataka

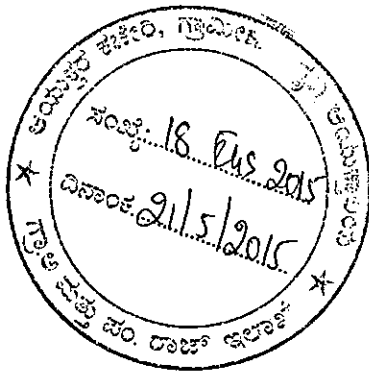
Important notes

1. Some of the rates adopted in this estimate are as per M.I. Circle schedule of rates of Bengaluru for 2014-15

Sl no	Item as per SoR(prevaling nrega or line dept or as per approved Data Sheet) or as per market	Unit	Quantity	Rate (In Rs)	Amount (in Rs)
1	2	3	4	5	6
1	Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conducts either in pits or in trenches 1.5m and above in width, in Hard soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specification Including shoring strutting danger lighting (NREGA SoR 2015-16) for ordinary soil				
a	For lift range 0.00m to 1.50 m	cum	13.83	198.06	2,739.17
b	For lift range 1.50m to 3.00 m Rate analysis MI SR pno 23 Basic rate = Rs198.06 add for lift =Rs 7.30 total =Rs205.36	cum	11.49	205.36	2,359.59
c	For lift range 3.00m to 4.50 m Rate analysis MI SR pno 23 Basic rate = Rs198.06 add for lift =Rs 14.70 total =Rs 212.76	cum	9.15	212.76	1,946.75
d	For lift range 4.50m to 6.00 m Rate analysis MI SR pno 23 Basic rate = Rs198.06 add for lift =Rs 22.00 total =Rs 220.06	cum	6.78	220.06	1,492.01
2	Supplying and fixing RC rings NP2 type 900mm dia of 300mm length(internal)as per detailed standard specifications including lifting lowering loading unloading supplying to site of work including transportation and constructing as per design dand drawings at site.(Market rate)	Each	20	600	12,000.00
3	Supplying and fixing RCC cap 1000mm dia 100mm thick as per detailed standard specifications including lifting lowering loading unloading supplying to site of work including transportation and constructing as per design dand drawings at site so that nobody or no animal should fall.(Market rate)	Each	1	1500	1,500.00
a	Supply of coarse aggregate 80 -40mm size(INO22 pn 6 of MI SR)	cum	5.44	335	1,822.40
4	Extra Lead charges upto 25kms (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) Rate analysis Lead charges up to 5km =107.10 Lead charges beyond 5km up to 25km (20x9.20) = 184.00 Total rate = 291.10	CUM	5.44	291.10	1,583.58
c	Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = 124.80	CUM	5.44	124.80	678.91



5	a	Supply of hard granite or hard basalt boulders of size 150mm to 450mm at quarry (Market rate)	cum	30.96	200.00	6,192.00
	b	Extra Lead charges upto 25kms (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) Rate analysis Lead charges up to 5km =107.10 Lead charges beyond 5km up to 25km (20x9.20) = 184.00 Total rate = 291.10	cum	30.96	291.10	9,012.46
	c	Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = 124.80	cum	30.96	124.80	3,863.81
6	Providing and constructing dry rubble rock-toe using rubble and store chips from dump approved souce uncluding cost of all materials, machinaery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes etc., complete with initial lead upto 1 km and all lifts.(Item No.42 P No 40 of M I Circle Bangalore for the year 2014-15) Basic rate Rs411.00 Rate analysis deduct Lead charges up to 1km as it is covered under lno 1b = -Rs67.30 deduct Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = -124.80 Total rate = 218.90	cum	30.96	218.90	6,777.14	
7	sub total					51,967.82
8	Add 1% for supervision charges					520.00
9	Add forsharpening of tools 98days Rs 10/day /person					980.00
	Name Board and Rounding off					1,532.18
	Total					55,000.00
Sign of Engineer						
Sign of PO/EO						



Measurement sheet

Name of work: Model estimate for construction of Recharge well

Financial year

2015-16

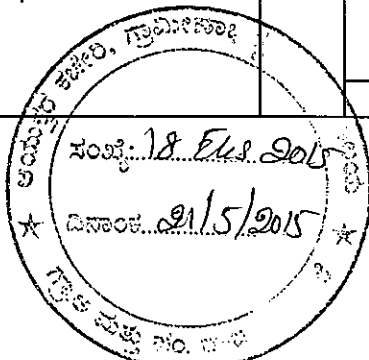
Head of Account = Mahatma Gandhi NREGS Karnataka

Work Code( As in nregasoft )

Important notes

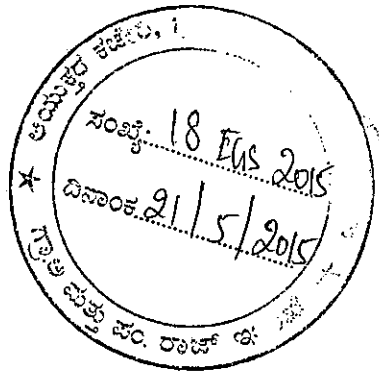
1. Some of the rates adopted in this estimate are as per M.I. Circle schedule of rates of Bengaluru for 2014-15 continued for 2015-16.
2. The area weightage pertaining to the respective areas to be adopted as per respective schedule of rates of respective circles of respective departments.
3. Some of the rates adopted in this estimate are also Nrega SoR for year 2015-16.
4. This is only a model estimate, the Officer/Engineer-in-charge should visit the site and prepare the estimate based on (i) Actual site conditions width and depths . (ii) Foundation to be designed as per existing geological conditions.
5. The overall variations in the cost should not exceed 10% of the estimated cost. In case if it exceeds 10% same should be got approved from the Commissionerate.
6. For procurement of material KTPP Act 1999 and rules 2000 to be followed.
7. For purpose of this estimate average lead of 25km is considered and lead charges are worked out as per MI SR .For actual estimate actual approve leads leads should be considered and estimate be prepared
8. Where rates are not available market rates are considered

Sl no	Item as per SoR(prevaling nrega or line dept or as per approved Data Sheet) or as per market	Unit	Measurements				Quantity
			No	Length (in Mt)	Breadth (in Mt)	Depth (in Mt)	
1	2	3	4	5	6	7	8
1	Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conducts either in pits or in trenches 1.5m and above in width, in Hard soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specification Including shoring strutting danger lighting (NREGA SoR 2015-16) for ordinary soil	Cum					
a	For lift range 0.00m to 1.50 m	Cum	$\left[ \frac{[(5.00 \times 2.00) + (4.22 \times 2.00)]}{2} \right] \times 1.50$				13.83
b	For lift range 1.50m to 3.00 m	Cum	$\left[ \frac{[(4.22 \times 2.00) + (3.44 \times 2.00)]}{2} \right] \times 1.50$				11.49
c	For lift range 3.00m to 4.50 m	Cum	$\left[ \frac{[(3.44 \times 2.00) + (2.66 \times 2.00)]}{2} \right] \times 1.50$				9.15
d	For lift range 4.50m to 6.00 m	Cum	$\left[ \frac{[(2.66 \times 2.00) + (2 \times 2.00)]}{2} \right] \times 1.20$				5.59
	Add for box cut at bpttom		2.00x2.00x0.30				1.20
			<u>Total</u>				6.78

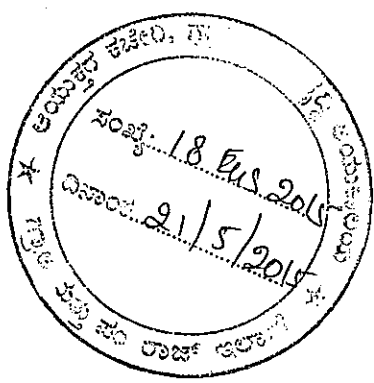


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2	Supplying and fixing RC rings NP2 type 900mm dia of 300mm length(internal)as per detailed standard specifications including lifting lowering loading unloading supplying to site of work including transportation and constructing as per design dand drawings at site.(Market rate)	Each	<u>1x20</u>	20	
3	Supplying and fixing RCC cap 1000mm dia 100mm thick as per detailed standard specifications including lifting lowering loading unloading supplying to site of work including transportation and constructing as per design dand drawings at site so that nobody or no animal should fall.(Market rate)	Each	<u>1x1</u>	1	
4	a	cum	$\frac{[(5.00+4.74)] \times 2.00 \times 0.50}{2}$	4.87	
			2.00x2.00x0.30	<u>1.20</u>	
				<u>6.07</u>	
			deduct for rings		
	Net qty		$\pi/4 \times 1.00^2 \times 0.80$	<u>-0.63</u> <u>5.44</u>	
4	b			Extra Lead charges upto 25kms (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) Rate analysis Lead charges up to 5km =107.10 Lead charges beyond 5km up to 25km (20x9.20) = 184.00 Total rate = 291.10	5.44
4	c			Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = 124.80	5.44
5	a	cum	$\frac{(4.74 \times 2.00) \times 2.00 \times 5.20}{2}$	35.05	
			$\pi/4 \times 5.20^2 \times 1.00^2$	<u>-4.08</u> 30.96	



5	b Extra Lead charges upto 25kms (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) Rate analysis Lead charges up to 5km =107.10 Lead charges beyond 5km up to 25km (20x9.20) = 184.00 Total rate = 291.10	cum	As per I no 5a	30.96
5	c Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = 124.80	cum	As per I no 5a	30.96
6	Providing and constructing dry rubble rock-toe using rubble and store chips from dump approved souce uncluding cost of all materials, machinaery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes etc., complete with initial lead upto 1 km and all lifts.(Item No.42 P No 40 of M I Circle Bangalore for the year 2014-15) Basic rate Rs411.00 Rate analysis deduct Lead charges up to 1km as it is covered under lno 1b = - Rs67.30 deduct Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = -124.80 Total rate = 218.90	cum	As per I no 5a	30.96
7	Add 1% for supervision charges	Lump sump		
8	Add forsharpening of tools 3 days Rs 10/day /person	Lump sump		
9	Name Board and Rounding off	Lump sump		
Sign of Engineer				
Sign of PO/EO				



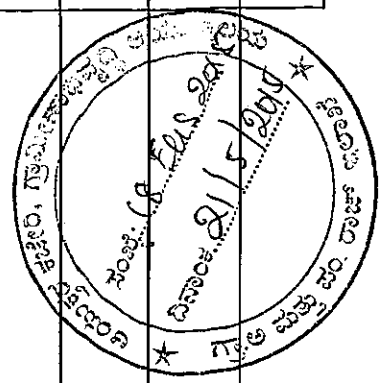
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**Part B**

**Detailed Estimation (Calculation) of labour and Material requirement**

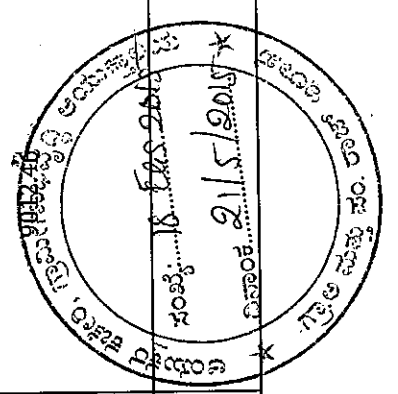
Name of work = Model estimate for construction of Recharge well  
 Financial year = 2014-15  
 Head of Account = Mahatma Gandhi NREGS Karnataka  
 Work Code( As in nregasoft)

SI no	Item as per SoR(prevaling nrega or line dept or As per approved Data Sheet) as in part A detailed and abstract estimate	Unit	Quantity	No of Person days	Wage rate for 2015-16 fixed by GOI, MoRD (col 5 x col 6)	Unskilled Labour Component	Skilled, Semi skilled wage and Material component including essential machinery like rollers etc but excluding unskilled labour displacing machinery	Amount (in Rs) ( col 11 x col 12)	8
1	Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conducts either in pits or in trenches 1.5m and above in width, in Hard soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specification Including shoring strutting danger lighting (NREGA SoR 2015-16) for ordinary soil	cum	13.83	13.43	204.00	2739.17			
a	For lift range 0.00m to 1.50 m	cum	11.49	11.57	204.00	2359.59			
	For lift range 1.50m to 3.00 m	cum	9.15	9.54	204.00	1946.75			
	For lift range 3.00m to 4.50 m	cum	6.78	7.31	204.00	1492.01			
	For lift range 4.50m to 6.00 m	cum							



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2	Supplying and fixing RC rings NP2 type 900mm dia of 300mm length(internal)as per detailed standard specifications including lifting lowering unloading supplying to site of work including transportation and constructing as per design dand drawings at site.(Market rate)	Each					12000.00
3	Supplying and fixing RCC cap 1000mm dia 100mm thick as per detailed standard specifications including lifting lowering loading unloading supplying to site of work including transportation and constructing as per design dand drawings at site so that nobody or no animal should fall.(Market rate)	Each					1500.00
	a	cum	5.44				1822.40
4	Extra Lead charges upto 25kms (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) Rate analysis Lead charges up to 5km =107.10 Lead charges beyond 5km up to 25km (20x9.20) = 184.00 Total rate = 291.10	CUM	5.44				1583.58
	c	CUM	5.44	3.33	204.00		678.91
	a	cum	30.96				6192.00
5	Extra Lead charges upto 25kms (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) Rate analysis Lead charges up to 5km =107.10 Lead charges beyond 5km up to 25km (20x9.20) = 184.00 Total rate = 291.10	cum	30.96				
	c	cum	30.96	18.94	204.00		3863.81

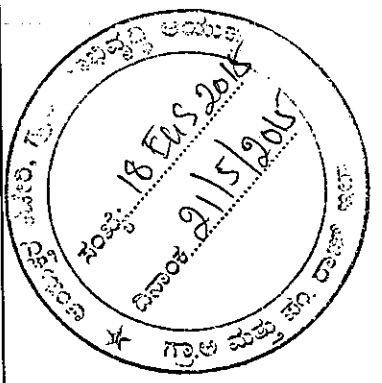


6	<p>Providing and constructing dry rubble rock-toe using rubble and store chips from dump approved source including cost of all materials, machinaery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes etc., complete with initial lead upto 1 km and all lifts.(Item No.42 P No 40 of M I Circle Bangalore for the year 2014-15)                  Basic rate Rs411.00                  Rate analysis deduct Lead charges up to 1km as it is covered under ino 1b = - Rs67.30                  deduct Loading and unloading charges (Item No.5 P No 21 of M I Circle Bangalore for the year 2014-15) (83.20+41.60) = -124.80</p>	cum	30.96	33.22	204.00	6777.14	
7	Total rate = 218.90					520.00	
8	Add 1% for supervision charges					980.00	
9	Add forsharpening of tools 98 days Rs 10/day /person					1532.18	
	Name Board and Rounding off			97.34 say 98 man days		19857.38	35142.62
	<b>Total</b>						

Unskilled labour Percentage 36.10%  
 Material Percentage 63.90 %

Sign of Engineer

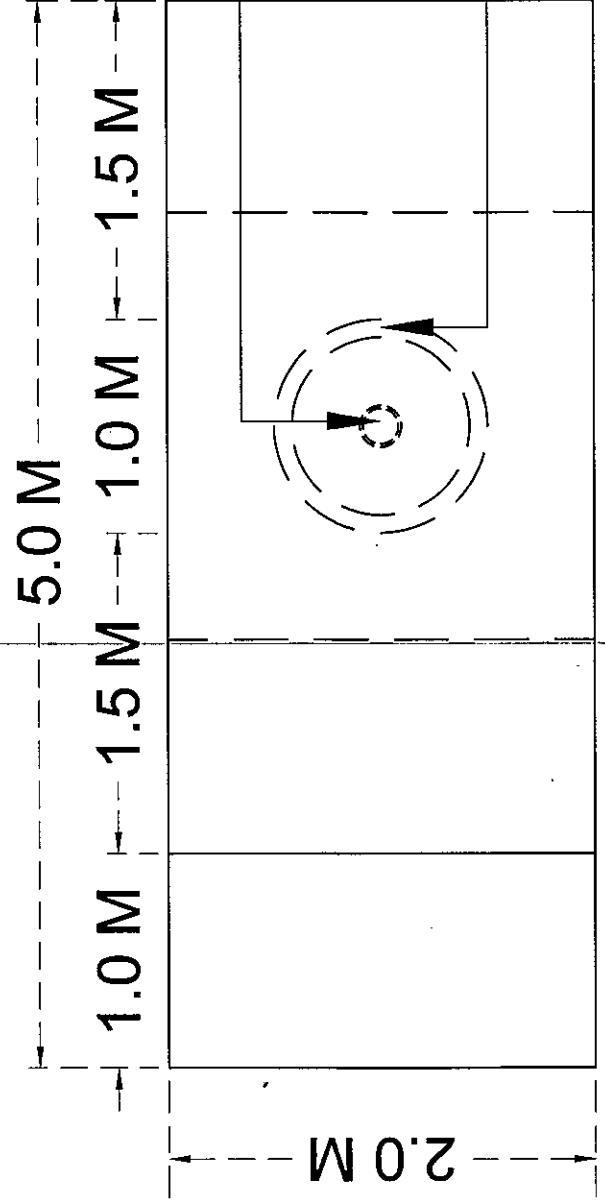
Sign of EO/PO and seal



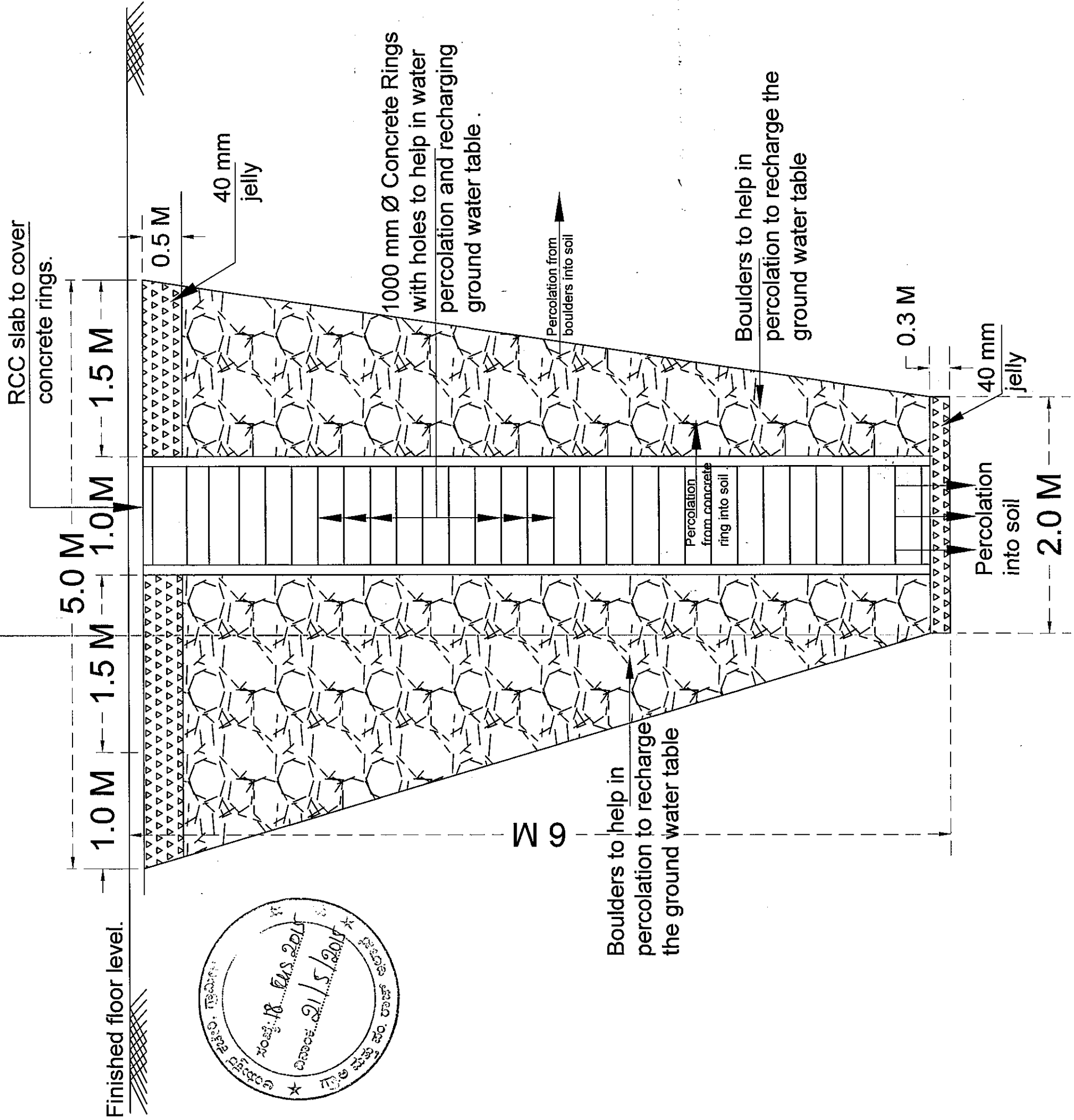


# Percolation Well

(P/1001)



## Plan



## Section

