

Rotary Club of Navi Mumbai, Mumbai, India.

Club Id. 15530

Dist 3140.

Project Report for Check Dam at Parli

The project committee headed by Rtn. Nitin Shah along with three other Rotarians visited the site and done the community need assessment and prepared this project report.

Project

For the Proposed Check Dam for storage and underground charge of Rain water for under ground water charging & irrigation purpose at Rajnagar, Parli , the newly adopted village of the Rotary Club.

The Rotary Club of Navi Mumbai studied the Community need for this and Carried out the Community Need assessment in this village project.

Location

The check dam will be erected at Rajnagar, Parli about 60 KM from Navi Mumbai Club.

Objectives

At Present

This area is surrounded by 12 adivasi villages, the villagers had to go to river Amba to fetch the drinking water. A local ashram called “ Shrimad Rajchandra Gyan Ashram” has adopted near by five villages and they have given them bore-wells for their convenience.

They have also setup a filtration plant for pure drinking water. These bore-wells need a constant ground water supply during dry summer, when the ground water level goes down. These village have no drinking water during the summer period and they have to travel about 6 KM to fetch the drinking water. If we construct a check-dams in this area, it would certainly bring up this ground water level during rainy days. This area gets maximum rainfall in Maharashtra. It is more than 120". In absence of such storage facilities, the water runs off to sea.

Visit To site

The Rotarians from the above rotary clubs has visited the place and seen the activities around this village. There is an ashram in this village which is an NGO working in this area and the Rotarians visited this site and studied the suitability of the place for construction of the Check Dam. We discussed with the trustees of this ashram and they agreed to joint hand with this project and help the Rotary club in getting the approval for erecting the check dam from the local government authorities.

The support services this ashram provided to the near by village are as under.

- Free School for the Adivasi village students
- Free medical check up for the Villagers

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- Free cataract Operation for the Villagers
- Vocational Training for the Adivasi Village women
- Special training for the women on Diyas, Torans, Eco friendly paper products their by they earn from their own self employment.
- Adivasi women are trained in cultivating natural Vegetables in the village (Farming).
- Tree Plantation in the adopted Village

Need for the Check Dam;

If we construct a check-dams in this area, it would certainly bring up the ground water level during rainy days. This area gets maximum rainfall in Maharashtra. It is more than 120". In absence of such storage facilities, the water runs off to sea. Also it will supply drinking water from the near by well to this village. Through this project the villages will get all the round water for drinking purpose and lot of their time can be utilised for productive purpose.

Beneficiaries

About 10 to 12 Villages will get the benefit from this project every year.

This Check dam would recharge the wells in this area. If this check- dam is constructed, it will recharge atleast 20 Sq. Kms. of the area and 10 to 12 adivasi villages will be benefited. The drinking water problems will be solved to a great extent.

Participation of Rotarians

Effectively 5 Rotarians will be actively participate in the project and will monitor the project till execution and handing over at the project country.

Project Contacts

Primary Contact

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Past President,

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Alternative Contact

Rtn. Anand Natarajan

Member ID # - 3512216

Imm. Past President,

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Public Awareness

This project will benefit a large population living in an around this area. This project will show case the Rotary Community service project on water management. Once completed the project will attract people towards rotary and the membership will also increase. We can call the local press and give the details of the Rotary work we are doing.

Other Co-Operating Organization

Shirmad Rajchandra Gyan Ashram, Mumbai will be co operating organization for this project.

Budget for the Project

Estimate for the work of construction of cement concrete checkdam over rain water channel river Amba. (As per the offer received from local contractors)

SNo.	PARTICULAR OF ITEM	Qty	Unit	Rate	Amount in Indian Rs.
1	Excavation in sandy soil and soft soil.	500	Cum.	151	75500
2	Excavation in hard murum.	250	Cum.	151	37750
3	Excavation in All types of rock including	75	Cum.	260	19500
4	PCC 1 :2:4 M 15 for anchor, Checkdam	400	Cum.	4341	1736400
5	RCC 1:1.5:3 M20 for Pedestal below slab	12	Cum.	5000	60000
6	RCC 1 :1.5:3 M20 for slab and parapet	18	Cum.	5000	90000
7	Reinforcement steel	12	MT	33100	397200
8	Mild steel gates with epoxy painting	7	No.	19500	136500
9	Drilling holes in rock for anchors	600	Rft.	45	27000
10	Metal ling over the Dam	1	Lot	21105	21105
	Vat Tax as applicable @ 8%				208070
	Service Tax as applicable @ 12.36% on 33%				106084
	Total in Indian Rs.				2915109

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The required approval from the Irrigation Department of Govt. of Maharashtra and other Local governing authorities is required for this project. Which will be obtained only after the formal approval for the MG is cleared.

This estimate is subject prepared assuming that the check dam shall be resting on the hard rock which is assumed to be encountered at 0.5 M. below river bed. The foundation shall have anchor of about 30 Cms. In hard rock. An additional anchor key of size 30 Cms. X 30 Cms. Shall be provided in rock along with steel bar anchors by drilling holes in the hard rock and grouting the holes with cement slurry.

Means of Project Finance

Project Financing (in USD):

Total Cost of the project in Rs. Rs. 29,15,109/-

Total Cost of the project in USD @ Rs.40/\$ Rs. 72,880/-

Contribution in USD.

From	Currency	USD
Rotary Club from Project Country	US\$	500
Dist 3140 DDF	US\$	17845
International Rotary Club	US\$	500
Dist DDF	US\$	17845
TRF fund on Club Matching from RI international (50% of Club Contribution)	US\$	500
TRF fund on DDF Matching from RI international (100% of DDF Contribution)	US\$	35690
Total	US\$	72880
Conversion Rate @ Rs.40/ USD		
Indian Rupees	In Rs.	2915109
Total		USD \$ 72,880/-

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We are looking forward to have your confirmation and approval of this project at your earliest.

Thanking You,

We remain in Rotary.



Rtn. Surekha Mhatre

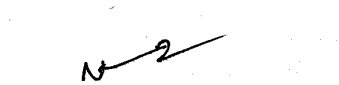
Club President 2007-08



Rtn. Anand Natarjan

Imm. Past President

Member ID # - 3512216



Rtn. S. Manoharan

Member ID# - 5256770

Past President &

Matching Grand Chairman 2007-08



Rtn. Nitin Shah

Member ID# - 2215664

Chairman Special Projects

Rotary Year 2007-08

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The site location where Rotary clubs are planning to construct a check dam for rain water Harvesting for under ground water charging & irrigation purpose.



Temporary Sand Gunny bag Check Dam constructed in the site for storing the rain water in the place for under ground water charging.
This will be augmented with a new Check dam near by.

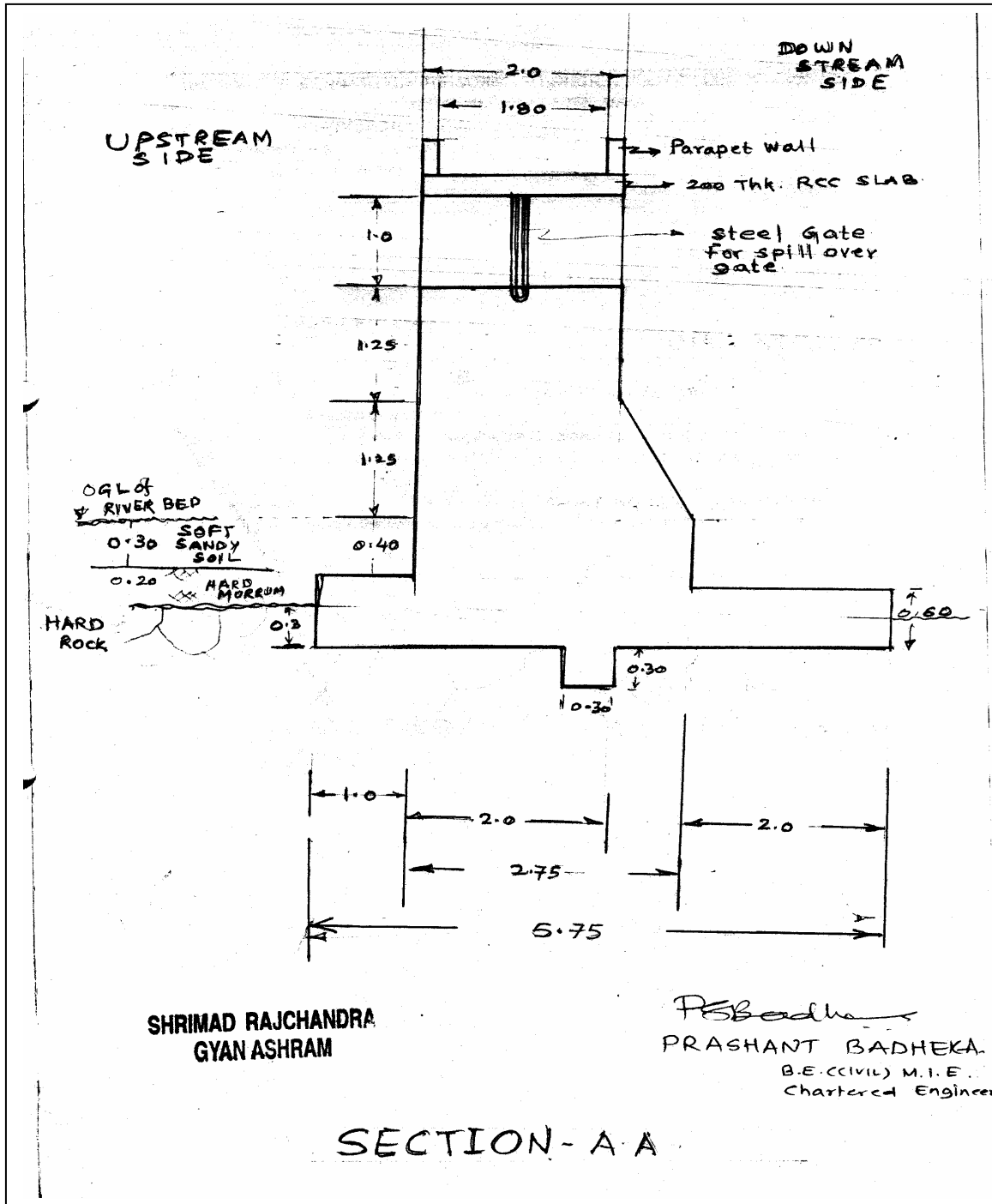


The banana Farm being benefited from the above check dam surrounding the area being inspected by Rotarians while doing the need assessment at the site.

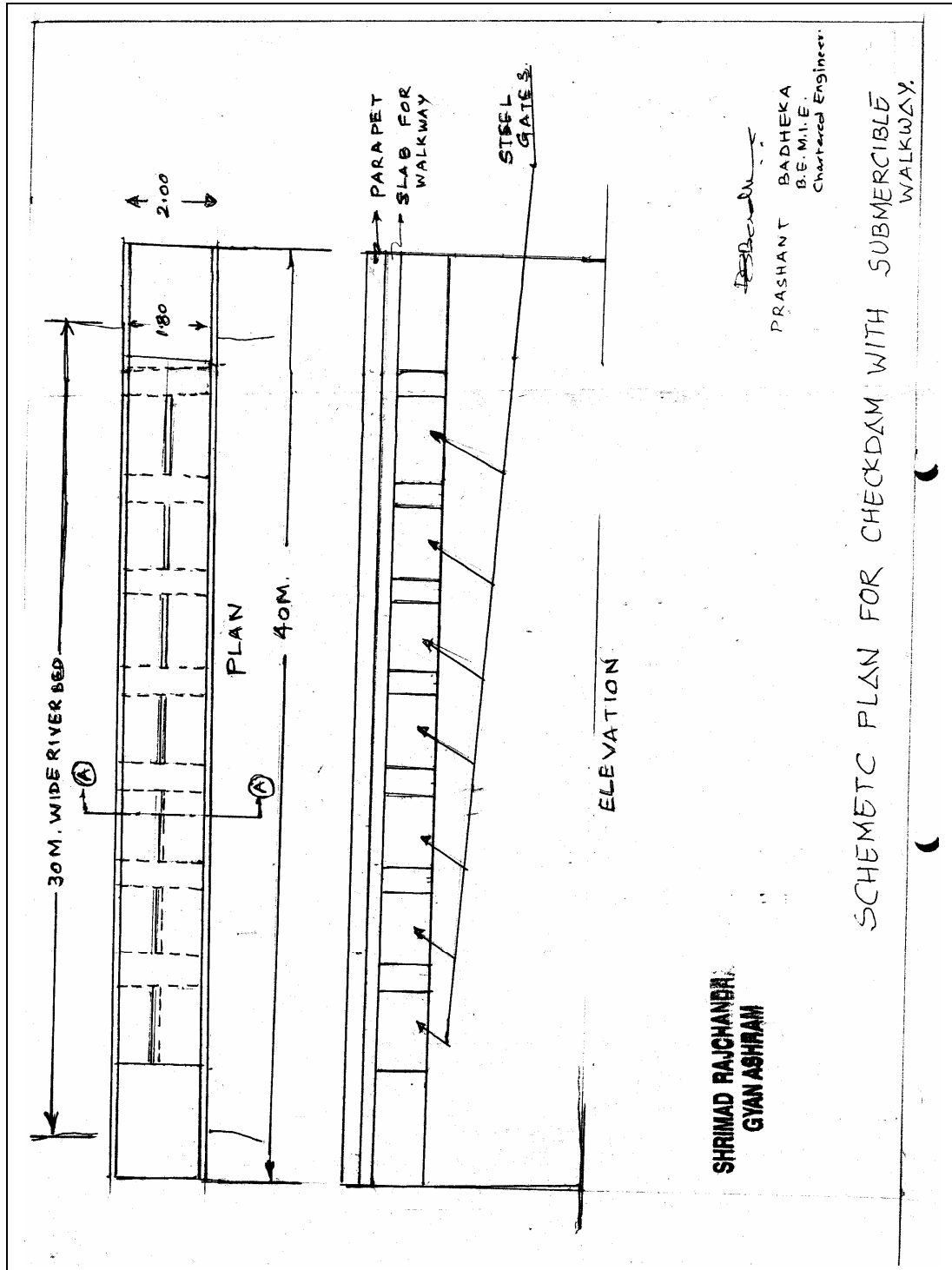
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Adivasi women working in the field near to the proposed site which will get benefit from the proposed Check dam and also the women under going vocational training in different craft and self employment vocations in the Ashram.



Sectional Elevation
 of the proposed water Check Dam for Rain Water Harvesting



Plan & Elevation
of the proposed water Check Dam for Rain Water Harvesting

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APPROXIMATE QUANTITIES						
<i>It is assumed that the length of the checkdam including the end anchorages shall be 40 M.</i>						
ITEM NO. 1 Excavation in ordinary soil, sandy soil Etc. for foundation and area excavation including disposal of the excavated earth upto 1000 M. away from river Etc. complete.						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	Area excavation behind the dam on upstream side	1	30	30	0.45	405
2	For foundation of the dam including apron on upstream and downstream side.	1	40	5.75	0.3	69
TOTAL						474
SAY						500 CUM.
ITEM NO. 2 Excavation in HARD MURRUM for foundation and area excavation including disposal of the excavated earth upto 1000 M. away from river Etc. complete.						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	Area excavation behind the dam	1	30	30	0.2	180
2	For foundation of the dam including apron on upstream and downstream side.	1	40	5.75	0.2	46
TOTAL						226
SAY						250 CUM.
ITEM NO. 3 Excavation in ALL TYPES OF ROCK for foundation including disposal of the excavated earth upto 1000 M. away from river Etc. complete.						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	For foundation of the dam including apron on upstream and downstream side.	1	40	5.75	0.3	69
2	For key below foundation	1	40	0.3	0.3	3.6
TOTAL						72.6
SAY						75 CUM.
ITEM NO. 4 PCC M15 (1:2:4) for anchor key, Levelling coarse and check dam						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	For foundation of the dam.	1	40	5.75	0.6	138
2	For key below foundation	1	40	0.3	0.3	3.6
3	Dam first lift	1	40	2.75	0.4	44
4	Dam second lift	1	40	2.375	1.25	118.75
	Dam Third lift	1	40	2	1.25	100
TOTAL						404.35
SAY						410 CUM.
ITEM NO. 5 RCC M20 (1:1.5:4) for pedestals below the walkway.						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	Walkway pedestals	8	2	0.75	1	12
TOTAL						12
SAY						12 CUM.

**SHRIMAD RAJCHANDRA
GYAN ASHRAM**

**Work Quantum Estimation Sheet for the
Proposed Water Check Dam for Rain Water Harvesting**

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ITEM NO. 7 Fixing reinforcement for RCC slab, as temperature reinforcement for dam and anchor for dam including cutting, bending and fixing with binding wire.						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	For RCC slab @ 60 Kg. / Cum.					1080
2	For Temperature reinforcement @ 10 Kg./ Cum.					41
					TOTAL	1121
				SAY	11.25	MT.

ITEM NO. 8 Fabricating and fixing Mild steel gates over spillway with accessories and painting the same with epoxy paint.						
NO.	PARTICULARS	NO.	L	W	H	QTY.
1	Gates	7	0.75		1	5.25
					TOTAL	5.25
				SAY	5.5	Sq.m.

RATE ANALYSIS FOR CEMENT CONCRETE M15 (1:2:4). For 1 Cum.					
NO.	PARTICULAR OF ITEM	QTY.	UNIT	RATE	AMOUNT
1	Metal No. 1, 2 and 3	35.32	Cft.	15	529.80
2	Sand	18	Cft.	12	216.00
3	Cement	7	Bag	255	1785.00
4	Cost of plasticizer(@ 1 % by wt of cement)	3.5	Lit.	55	192.50
5	Centering labour with material	1	Cum.	300	300.00
6	Concreting labour	1	Cum.	250	250.00
7	Add for dewatering	L.S.			25.00
					3298.30
				Add 1 % water charge	32.98
					3331.28
				Add 15 % Contractor's profit and overheads	499.69
					3830.98
					Say Rs. 3850.00 per Cum.

RATE ANALYSIS FOR CEMENT CONCRETE M20 (1:1.5:3). For 1 Cum.					
NO.	PARTICULAR OF ITEM	QTY.	UNIT	RATE	AMOUNT
1	Metal No. 1, 2 and 3	35.32	Cft.	15	529.80
2	Sand	18	Cft.	12	216.00
3	Cement	8	Bag	255	2040.00
4	Cost of plasticizer(@ 1 % by wt of cement)	4	Lit.	55	220.00
5	Centering labour with material	1	Cum.	400	400.00
6	Concreting labour	1	Cum.	300	300.00
					3705.80
				Add 1 % water charge	37.06
					3742.86
				Add 15 % Contractor's profit and overheads	561.43
					4304.29
					Say Rs. 4305.00 per Cum.

Design Cost Estimation Sheet for the
Proposed Water Check Dam for Rain Water Harvesting