

**DETAILED NOTE ON THE PROJECT PROVIDING DRINKING WATER SUPPLY UNDER  
TELANGANA WATER SUPPLY PROJECT TO MULUGU ASSEMBLY CONSTITUENCY  
(3 MANDALS) IN WARANGAL DISTRICT.**

**PROJECT COST: Rs 135.00 Crores.**

**Geography:**

As part of the flagship program of Government viz. Telangana Drinking water supply project (TDWSP) this Estimate is prepared for providing drinking water in Mulugu constituency of Warangal District.

Mulugu constituency covers 7 mandals namely Mulugu, Venkatapur, Govindaraopet, SS Thadvai, Eturnagaram, Mangapet and Kothaguda. The total population of this constituency is 285212.

The details of the population of the project are as follows.

Sl.No	Constituency	Mandal	No of Habs	Population			
				Plain	SC	ST	Total
1	2	3	4	5	6	7	8
1	Mulugu	Mulugu	77	40241	7685	14229	62155
2	Mulugu	Venkatapur	59	26619	6873	5468	38960
3	Mulugu	Govindaraopet	35	18850	4178	7678	30724
4	Mulugu	SS Thadvai	50	9520	2293	11934	23747
5	Mulugu	Eturnagaram	52	19829	9852	11364	41045
6	Mulugu	Mangapet	62	31356	6481	10660	48497
7	Mulugu	Kothaguda	82	13232	2470	24382	40084
	<b>Total</b>		<b>417</b>	<b>159647</b>	<b>39832</b>	<b>85715</b>	<b>285212</b>

**Necessity of the project:**

In these mandals, at present in most of the habitations Water supply scheme sources are mainly bore wells. In summer most of the sources are becoming either dry or yielding less water due to depletion of ground water and in some habitations due to poor water bearing capacity of sub-surface strata. As such, people are facing acute shortage of water right from February every year. During every summer and rainy seasons numerous cases of water borne diseases like GE and diahorrea are being reported due to contamination of water.

As the district is covered by various geological formations and erratic rainfall conditions, the availability of ground water is meager and not safe both qualitatively and quantitatively. Because of the shallow basement and lack of secondary porosity, the ground water occurrence is very poor in most part of the district. As far as the water quality is concerned, the ground water is polluted with fluoride, iron, nitrates etc, and it is also prone to bacteriological contamination. In these

circumstances, it is better to supply surface water for drinking water supply schemes rather than ground water. Treatment of ground water is difficult and costlier when compared to surface water.

Priority of the government is to ensure, that every person has enough safe water for drinking, cooking and other domestic needs as well as live stocks throughout the year even during natural disasters by 2018, every rural person should have access to 100lpcd within their household, particularly in to the kitchen without barriers of social or financial discrimination.

It is further submitted that there is 1 existing/ongoing CPWS Schemes in the project area the details are furnished below:

Sl.No	Name of the CPWSS	Estt.Cost (Lakhs) /Grant	Source Details	RSF Cap in MLD	Whether Source Perennial/Sustainable
1	CPWSS to Mulugu & other Habs	Rs.2700 NABARD	Ramappa Lake	21.6	No

Due to un certainty (being unsustainable) on continuous availability of water in the sources of above mentioned CPWS Schemes, increased maintenance costs due to running more no of WTPs and major Transmission pipelines and Pumping mains were laid with AC pipes, network of pipe line to habitations with PVC pipes. these schemes with existing RSFs are considered for integration under TDWSP.

#### Source of the Project

Source of the segment is Ramappa lake linked to Devadula lift Irrigation Scheme. Ramappa Lake is a reservoir with a capacity of 2.9 TMC. Dead Storage is 0.117 TMC. It is rain fed tank with no feeding from Godavari river so far though it is 60Kms away from Godavari River.

The grid is planned to cover 3 mandals in Mulugu constituency for a population of 131839 with a demand of 0.257 TMC. Total length of pipeline required for grid is 359.864 Kms. Head works are located at Palampet(V) of Venkatapur Mandal, 2 numbers of GLBRs are proposed at various places in Palampet Hillock to supply water by gravity. Wherever pressure is dropped in the gravity main, sumps are proposed. Total 1 number of 600 KL clear water sump is required at Palampeta Head works for the segment. To cover all the three mandals, various sizes of pumps are required. Total cost of the Ramappa sub-segment is **135.00 Crores**



By considering the above source,


1. Providing Drinking water supply to all the 3 Mandals of Mulugu Constituency with Ramappa Lake as source.
2. The total requirement (Ultimate as on 2048) of the proposed drinking water project is **0.257 TMC** from Ramappa Lake.

The following components are proposed in this estimate.


1. Raw water is proposed for drawl from the existing Intake well.
2. Pumping main from Head works to GLBRs near Palampet(V) of Venkatapur(M) with 350 mm dia MS pipe for 2Kms length is proposed.
3. Clear water sump of 600 KL capacity at Head works at Palampet(V) of Venkatapur(M).
4. BPT of 100 KL is proposed at Jawaharnagar.
5. At Raw Water Intake well VT pumps are proposed.
6. GLBRs at 324.00 LVL a capacity of 70KL and 100KL at 245.00LVL are proposed respectively.
7. Pipe line network to connect habitations. The pipe lines are mainly proposed with MS, DI, PCCP, BWSC and HDPE pipes. Further, water supply pipe lines are proposed up to village OHSR point
8. LS provision is incorporated for Dedicated power supply, Transformer Yards, road and Railway crossings, Canal crossings, land acquisition, Forest permissions, Change in Soil Classification, Hard rock Removal and other unforeseen items.
9. Gravity lines with HDPE pipes, DI Pipes & BWSC pipes

Provisions for 5% for VAT, 1% for CESS and contractors profit are made in the estimate.

The Estimate is prepared as per the 2015-16 SSR Rates. The estimate cost arrived at Rs. **135.00**crores for water supply up to village OHSR.

  
Superintending Engineer  
TDWSP Circle Warangal


"Counter Signed"

  
Chief Engineer

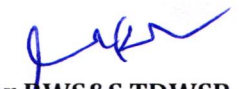
**RWS&S TDWSP, Hyderabad**

### Details of Surveyors

S.No	Name of the Agency	Details of the instrument used	Persons involved	Duration of Survey
1	M/s Pathfinder Surveyors, Warangal.	DGPS Instrument LEICA Make	Mr. Ratnakar Mr. Vishnuwardhan Mr. Padmakar Mr. Shyam	One month

  
Superintending Engineer  
TDWSP, Circle Warangal

"Counter Signed",

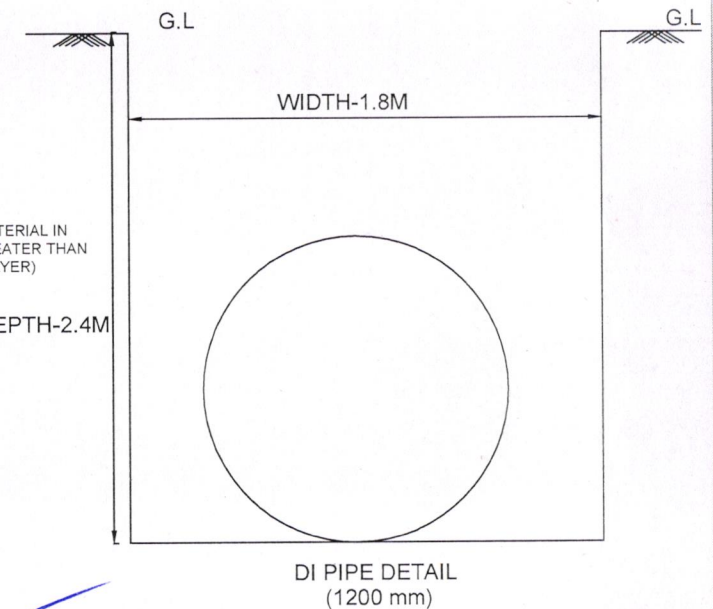
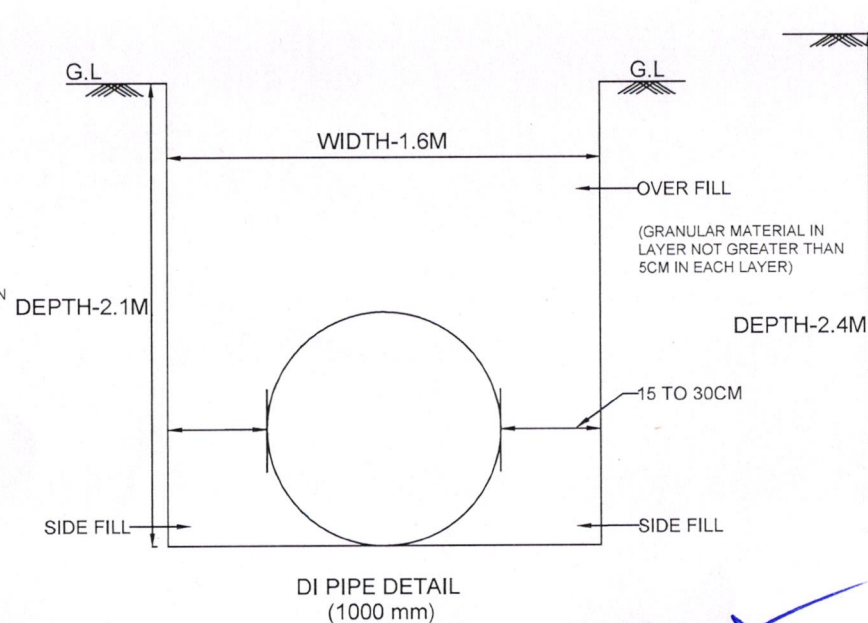
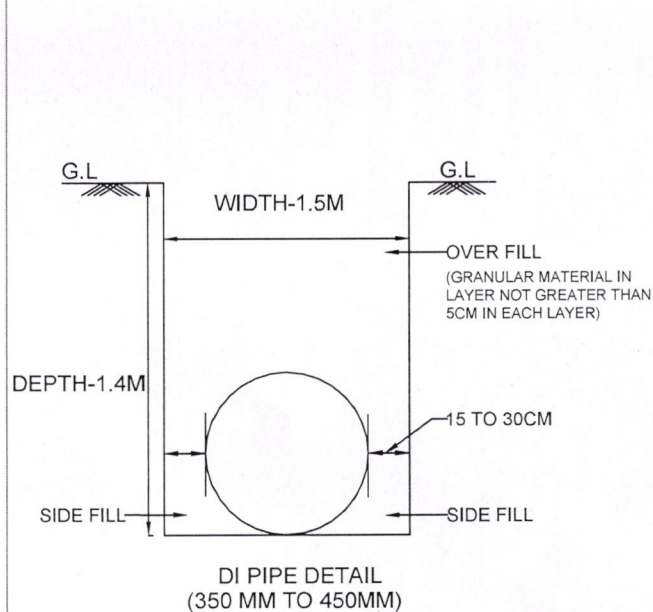
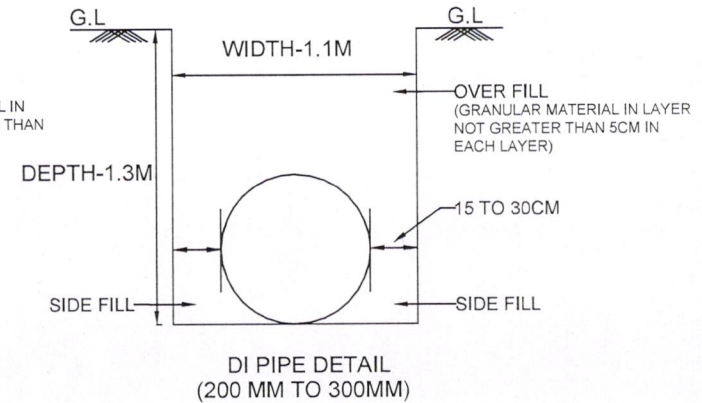
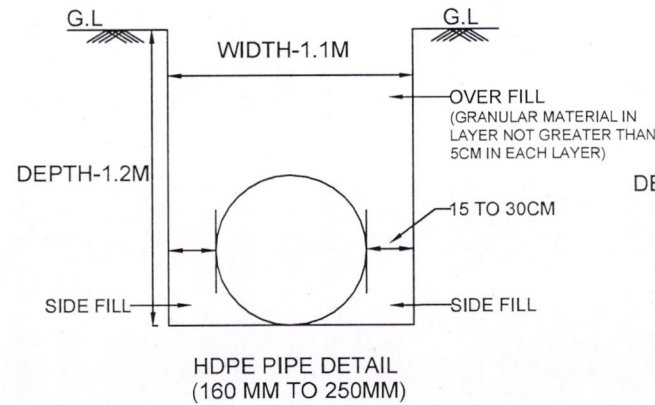
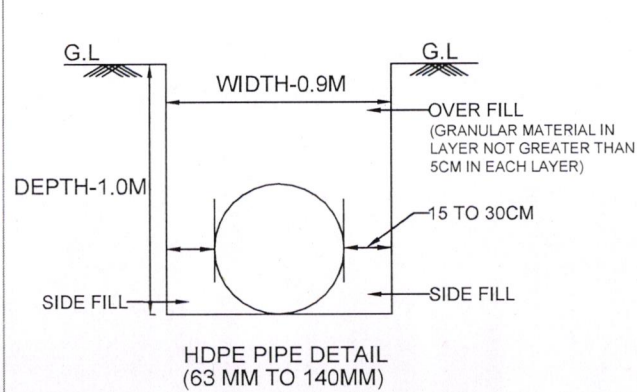
  
Chief Engineer RWS&S TDWSP,  
Hyderabad



# DETAILS OF FOREST AREA INVOLVED IN RAMAPPA SEGMENT-20/1

S.No	DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	SET_NO	Dia	Length_mt	Width	Area_Ha	Remark
1	WARANGAL NORTH	MULUG	PALAMPET	PALAMPET	RAMAPPA-I	565	2	350	2317.009	1.500	0.348	Pipe Line
2	WARANGAL NORTH	MULUG	PALAMPET	PALAMPET	RAMAPPA-I	565	1	0	514.670	6.000	0.309	Road
3	WARANGAL NORTH	MULUG	PALAMPET	PALAMPET	RAMAPPA-I	565	1	350	151.454	3.000	0.045	Pipe Line
4	WARANGAL NORTH	PASARA	NARLAPUR	YENGLAPUR	VENKATAPUR-I	467	9	75	3848.965	0.900	0.346	Pipe Line
5	WARANGAL NORTH	BHULPALLI_NORTH	TIRMALAGIRI	RAVULAPALLI	JAKARAM-III	610	3	63	3033.622	0.900	0.273	Pipe Line
6	WARANGAL NORTH	MULUG	PALAMPET	INCHERLA	RAMAPPA-II	567	6	75	393.843	0.900	0.035	Pipe Line
7	WARANGAL NORTH	PASARA	SALVAI	KOTHANAGARAM	VENKATAPUR	460	8	75	556.763	0.900	0.050	Pipe Line
8	WARANGAL NORTH	PASARA	SALVAI	KOTHANAGARAM	VENKATAPUR	462	8	90	4557.139	0.900	0.410	Pipe Line
9	WARANGAL NORTH	PASARA	SALVAI	KOTHANAGARAM	VENKATAPUR	462	8	63	654.909	0.900	0.059	Pipe Line
10	WARANGAL NORTH	PASARA	SALVAI	KOTHANAGARAM	VENKATAPUR	463	9	63	784.592	0.900	0.071	Pipe Line
11	WARANGAL NORTH	PASARA	SALVAI	KOTHANAGARAM	VENKATAPUR	463	8	75	443.623	0.900	0.040	Pipe Line
12	WARANGAL NORTH	BHULPALLI_NORTH	TIRMALAGIRI	THIRMALAGIRI	JAKARAM-I	582	4	75	4106.974	0.900	0.370	Pipe Line
13	WARANGAL NORTH	MULUG	JAKARAM	PANDIKUNTA	JAKARAM-I	592	4	350	965.341	1.500	0.145	Pipe Line
14	WARANGAL NORTH	BHULPALLI_NORTH	TIRMALAGIRI	THIRMALAGIRI	JAKARAM - I	600	5	250	3637.926	1.100	0.400	Pipe Line
15	WARANGAL NORTH	PASARA	PASRA	KARLAPALLI_N	BANDAL	360	7	63	498.686	0.900	0.045	Pipe Line
16	WARANGAL NORTH	MULUG	JAKARAM	PANDIKUNTA	JAKARAM-I	598	5	200	1745.350	1.100	0.192	Pipe Line
17	WARANGAL NORTH	MULUG	PALAMPET	PALAMPET	RAMAPPA-I	565	1	-	-	-	0.045	GLBR
18	WARANGAL NORTH	MULUG	PALAMPET	PALAMPET	RAMAPPA-I	565	1	-	-	-	0.071	GLBR
TOTAL									28210.866	TOTAL		
										3.254		

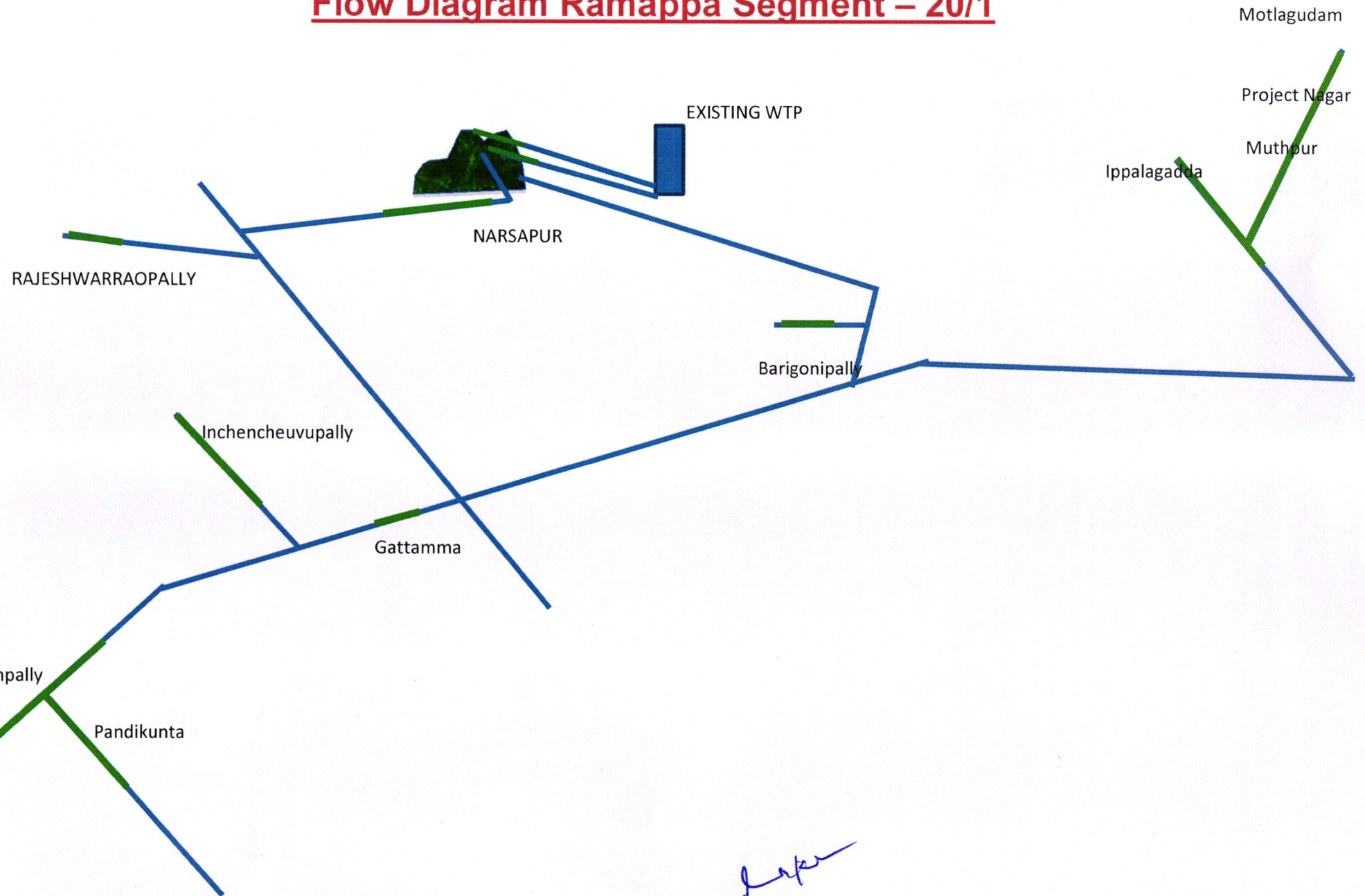
TELANGANA DRINKING WATER SUPPLY PROJECT RAMAPPA SEGMENT-20/1  
MAP SHOWING PIPELINE CROSS-SECTION IN FOREST AREA OF WARANGAL.



Chief Engineer  
TDWS (RWS&S), Hyderabad.



## Flow Diagram Ramappa Segment – 20/1



*[Signature]*  
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