

BRIEF NOTE ON THE PROJECT.

KOTHAGUDA - SEGMENT - 17/3 IN WARANGAL DISTRICT.

Division of 1.638 Ha. in WLM Warangal Division, 18.502 Ha. in Warangal South Division & 1.771 Ha. in Warangal North Division out of a Total of 21.911 Ha. of Forest land for 'Laying of pipe lines and Construction of other structures for providing safe drinking water to Mulug, Narsampet & Mahabubabad Constituencies, Warangal District, Segment 17/3 - Kothaguda"

The Government of Telangana has decided to take up the Water Grid programme as a flag ship item to provide safe drinking water to all rural and urban people at 100 lpcd to rural households and 135 lpcd in municipalities and 150 lpcd in corporation areas.

The provision of safe drinking water deserves top priority to improve the health and economic development of the people in the project area. Majority of people in the Project area are tribal, illiterate and economically very poor. Scarcity of water is one of the major problems in this area.

The people in district purely depend only on ground water for drinking, domestic and agriculture purposes. Warangal District comprises geographically the underlain granites with coarse to medium texture. Dolerite dykes varying from few meters to hundreds of meters traverse the area. These dykes are very hard and compact and stand out prominently in the granite rocks. The ground in the area is limited to secondary porosity developed through fracturing and subsequent weathering. The movement of ground water is controlled by the degree of inter connection of these secondary pores.

So, it is extremely difficult to obtain potable drinking water especially in the project area. The bore wells fitted with hand pumps are yielding very little and proved failure in many places as the water table has depleted very fast due to frequent failures of monsoon in the District. Many of habitations which are covered partially earlier are again looking for relief as the source infrastructure provided is in need of either augmentation or replacement. Due to shallow basin of the area having very poor potential of ground water and over exploited by the farmers for irrigation purposes by digging many of open wells in their fields, the individual sources of open wells for the PWS Schemes and MPWS Schemes have become seasonal and failed to supply sufficient drinking water to the people in project area, in summer months.

PROJECT DESIGN CRITERIA:

The design parameters adopted for this project component are detailed below:

i) Design Period:

The year 2018 is taken as the proposed year of commissioning and considered as the base year. The ultimate design period of the project is considered as 30 years over the base year.

ii) Design Population & Population Forecast

The base year population is worked out by adding the population increase @ 0.8% growth rate from 2011 to 2018 to the population of 2011. The ultimate design population is worked out by increasing @ 0.8% growth rate in Geometric Progression for 30 years over the base year population. And for urban population the growth rate is considered as 2% in Geometric Progression.

iii) Design Parameters:

Established parameters are followed in the system design. Sources and transmission main lines are designed for ultimate population. Sumps, Water Treatment Plants, balancing and service reservoirs, pumping machinery are designed for prospective population (i.e., 15 years period over base year).

iv) Service Level:

The service level of 100lpcd for rural area, 135lpcd for urban area and 150 lpcd for corporations is considered.

v) System Design Criteria:

- | | |
|--|---|
| 1) Operation Period of Pumping Machinery | 22 hours |
| 2) Treatment | Rapid Sand Filters |
| b) Disinfecting by addition of | Chlorine in gas form |
| 3) Clear Water Sump
Intermediate sumps | 4 hours capacity for |
| 4) Service Storage of prospective
daily demand. | Capacity required for 50%
(i.e. Two fillings) |
| 5) Balancing Reservoir | 30-60minutes |
| 6) Pumping Machinery
Selection – preliminary Design | As per discharge and head |

➤ **Source:** Yellapur gutta OHBR & Marrigudem OHBR in Village of Cheruvu kommu thanda Gudur Mandal and Marrigudem Village of Kothaguda Mandal in Warangal District

Sl.No	Name of the Constituency	Name of the Mandal	Population covered(2011)	No of Habs
1	MULUGU	Kothaguda	42126	86
		Thadvai(Part)	2505	9
	WARANGAL RURAL TOTAL		44631	95

➤ Structures:

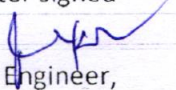
➤ b) Sumps— 2 Nos

➤ c) OHBRs— 2 Nos

Sl.No	Name of the Structure	Location	Capacity in KL	Staging mtrs	GL	MWL	Remarks
1	2	3	4	5	6	7	8
1	Sump	Yellapur	1000		299.00		
2	Sump	Marrigudem	300		314.00		
3	OHBR	Marrigudem	40	30.00	370.00	340.00	
4	OHBR	Yellapur(Kgd)	150	20.00	282.60		

➤ Industrial Requirement: Considered 10% of Total Demand


Superintending Engineer
TDWSP Circle, Warangal

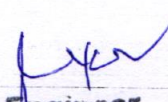
Counter signed

Chief Engineer,
TDWSP, Hyderabad.

AREA STATEMENT - KOTHAGUDA SEGMENT - 17/3 - WARANGAL									
Set	Structure type	Pipe Dia	Length in m	width m	Area_Ha	Total area in Ha	REMARKS		
1	PIPELINE	90	1845.197	0.70	0.129	0.488	WLM		
	PIPELINE	90	2749.116	0.70	0.192				
	PIPELINE	160	1711.655	0.80	0.137				
	PIPELINE	160	224.747	0.80	0.018				
	PIPELINE	160	150.017	0.80	0.012				
	PIPELINE	90	2622.761	0.70	0.184				
	PIPELINE	63	460.317	0.70	0.032				
	PIPELINE	63	1135.407	0.70	0.079				
	PIPELINE	1100	3044.451	2.00	0.609				
	PIPELINE	90	2520.719	0.70	0.176				
3	PIPELINE	90	3005.510	0.70	0.210	0.386	WLM		
	PIPELINE	63	5725.354	0.70	0.401				
4	PIPELINE	1100	3247.143	2.00	0.649	0.401	WLM		
5	PIPELINE	63	839.907	0.70	0.059	1.196	WLM		
	PIPELINE	63	113.635	0.70	0.008				
	PIPELINE	63	195.776	0.70	0.014				
	PIPELINE	63	769.363	0.70	0.054				
	PIPELINE	90	3005.662	0.70	0.210				
	PIPELINE	1100	939.248	2.00	0.188				
	PIPELINE	63	199.971	0.70	0.014				
	PIPELINE	1100	2935.838	2.00	0.587				
	PIPELINE	63	1910.013	0.70	0.134				
	PIPELINE	63	946.396	0.70	0.066				
6	PIPELINE	63	1501.390	0.70	0.105	1.418	WLM		
	PIPELINE	125	2951.935	0.70	0.207				
	PIPELINE	63	315.560	0.70	0.022				
	PIPELINE	75	2642.510	0.70	0.185				
	PIPELINE	75	1593.871	0.70	0.112				
	PIPELINE	63	2275.749	0.70	0.159				
	PIPELINE	1000	3410.131	2.00	0.682				
	PIPELINE	63	581.686	0.70	0.041				
	PIPELINE	63	509.004	0.70	0.036				
	PIPELINE	63	1202.136	0.70	0.084				
7	PIPELINE	63	2629.059	0.70	0.184	1.186	WLM		
	PIPELINE	90	1029.061	0.70	0.072				
	PIPELINE	400	1191.949	0.70	0.083				
	PIPELINE	400	458.905	2.50	0.115				
	PIPELINE	400	7312.587	1.00	0.731				
	PIPELINE	400	2601.430	1.00	0.260				
	PIPELINE	400	6717.503	1.00	0.672				
	PIPELINE	90	633.309	0.70	0.044				
	PIPELINE	63	1308.555	0.70	0.092				
	OHBR	350	4808.851	1.00	1.129				
9	PIPELINE	350	3656.645	1.00	0.366	3.524	WLM		
	PIPELINE	63	1357.743	0.70	0.095				
	PIPELINE	63	1277.648	0.70	0.089				
	PIPELINE	200	1910.431	0.80	0.153				
	PIPELINE	63	811.212	0.70	0.057				
	PIPELINE	225	1748.926	0.90	0.157				
	PIPELINE	315	2320.140	1.00	0.232				
	PIPELINE	90	262.300	0.70	0.018				
	PIPELINE	315	292.598	1.00	0.029				
10	PIPELINE	315	292.598	1.00	0.029	1.196	WLM		
	PIPELINE	90	262.300	0.70	0.018				
	PIPELINE	315	2320.140	1.00	0.232				
	PIPELINE	225	1748.926	0.90	0.157				
	PIPELINE	63	811.212	0.70	0.057				
	PIPELINE	200	1910.431	0.80	0.153				
	PIPELINE	63	1277.648	0.70	0.089				
	PIPELINE	63	1357.743	0.70	0.095				
	PIPELINE	350	3656.645	1.00	0.366				
	PIPELINE	350	4808.851	1.00	1.129				

Set	Structure type	Pipe Dia	Length in m	width m	Area_Ha	Total area in Ha	REMARKS
11	PIPELINE	75	2673.953	0.70	0.187	1.088	WLM
	PIPELINE	75	2018.622	0.70	0.141		
	PIPELINE	75	1652.310	0.70	0.116		
	PIPELINE	75	1855.693	0.70	0.130		
	PIPELINE	75	738.304	0.70	0.052		
	PIPELINE	75	1377.530	0.70	0.096		
	PIPELINE	90	2959.329	0.70	0.207		
	PIPELINE	63	1224.437	0.70	0.086		
	PIPELINE	75	1038.435	0.70	0.073		
12	PIPELINE	63	870.846	0.70	0.061	1.054	WLM
	PIPELINE	63	579.849	0.70	0.041		
	PIPELINE	110	881.475	0.70	0.062		
	PIPELINE	160	1356.483	0.80	0.109		
	PIPELINE	200	4089.003	0.80	0.327		
	PIPELINE	200	2975.589	0.80	0.238		
	PIPELINE	250	1517.277	0.80	0.121		
	PIPELINE	63	1186.985	0.80	0.095		
13	PIPELINE	160	1807.364	0.80	0.145	0.648	WLM
	PIPELINE	160	6291.648	0.80	0.503		
14	PIPELINE	110	2366.931	0.70	0.166	0.472	WLM
	PIPELINE	63	1573.777	0.70	0.110		
	PIPELINE	110	500.876	0.70	0.035		
	PIPELINE	125	1190.484	0.70	0.083		
	PIPELINE	90	1112.259	0.70	0.078		
15	PIPELINE	125	2629.171	0.70	0.184	0.332	WLM
	PIPELINE	63	1130.382	0.70	0.079		
	PIPELINE	63	984.401	0.70	0.069		
16	PIPELINE	90	3036.041	0.70	0.213	0.718	WLM
	PIPELINE	63	713.294	0.70	0.050		
	PIPELINE	75	1980.888	0.70	0.139		
	PIPELINE	110	2533.155	0.70	0.177		
	PIPELINE	200	1434.826	0.80	0.115		
	PIPELINE	90	344.128	0.70	0.024		
	PIPELINE	160	5309.141	0.80	0.425		
17	PIPELINE	63	1813.582	0.70	0.127	0.693	WLM
	PIPELINE	63	1357.249	0.70	0.095		
	PIPELINE	63	541.679	0.70	0.038		
	PIPELINE	63	117.428	0.70	0.008		
	PIPELINE	110	3678.444	0.70	0.257		
19	PIPELINE	75	3775.999	0.70	0.264	0.834	Eco- sensitive zone
	PIPELINE	75	8141.807	0.70	0.570		
20	PIPELINE	125	2911.349	0.70	0.204	0.501	Eco- sensitive zone
	PIPELINE	90	1598.741	0.70	0.112		
	PIPELINE	160	1421.144	0.80	0.114		
	PIPELINE	63	1017.317	0.70	0.071		
21	PIPELINE	160	3701.584	0.80	0.296	0.682	Eco- sensitive zone
	PIPELINE	140	3472.575	0.70	0.243		
	PIPELINE	63	1596.612	0.70	0.112		
	PIPELINE	140	443.314	0.70	0.031		

Set	Structure type	Pipe Dia	Length in m	width m	Area_Ha	Total area in Ha	REMARKS
22	PIPELINE	160	2594.955	0.80	0.208	1.203	Eco- sensitive zone
	PIPELINE	63	456.434	0.70	0.032		
	PIPELINE	63	766.242	0.70	0.054		
	PIPELINE	250	504.951	2.50	0.126		
	OHBR				0.783		
23	PIPELINE	125	5889.376	0.70	0.412	0.547	Eco- sensitive zone
	PIPELINE	125	1927.796	0.70	0.135		
24	PIPELINE	63	4039.540	0.70	0.283	1.198	Eco- sensitive zone
	PIPELINE	63	6668.104	0.90	0.600		
	PIPELINE	63	2172.128	0.70	0.152		
	PIPELINE	90	2330.998	0.70	0.163		
	PIPELINE	63	1791.283	0.70	0.125		
25	PIPELINE	63	1183.145	0.70	0.083	0.438	Eco- sensitive zone
	PIPELINE	63	3291.731	0.70	0.230		
	PIPELINE	63	2588.789	0.70	0.181		
26	PIPELINE	140	2588.789	0.70	0.181	0.392	WLM
	PIPELINE	63	3019.236	0.70	0.211		
TOTAL AREA IN HA			238359.445		21.911	21.911	

 **Superintending Engineer**
TDWSP Circle, Warangal.

 **Chief Engineer**
TDWSP Hyderabad.

Forest Area Statement (Segment -17-3 -KOTHAGUDA)
FOR THE WORK "Laying of pipe lines and Construction of other structures for providing safe drinking water to Mulug, Narsampet & Mahabubabad
Constituencies , IN WARANGAL DISTRICT

DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	SET1	LENGTHF	AREAF	Dia	Width	TYPE
1	2	3	4	5	6	7	8	9	10	11	12
WARANGAL WLM	KOTHAGUDA-II	KARLAI	KARLAI	GUDURU	1010	4	5725.354	0.401	63	0.70	WILDLIFE
WARANGAL WLM	KOTHAGUDA-II	KARLAI	KARLAI	GUDURU	1054	11	2959.329	0.207	90	0.70	WILDLIFE
WARANGAL WLM	KOTHAGUDA-II	KARLAI	KARLAI	GUDURU	1020	11	1224.437	0.086	63	0.70	WILDLIFE
WARANGAL WLM	KOTHAGUDA-II	KARLAI	DORAVARIVEMPALLY	GUDURU-1	1110	13	6291.648	0.503	160	0.80	WILDLIFE
WARANGAL WLM	KOTHAGUDA-II	KARLAI	DORAVARIVEMPALLY	GUDURU	1100	13	1807.364	0.145	160	0.80	WILDLIFE
Wildlife Area under WLM Division Warangal =							18008.132	1.342			
WARANGAL SOUTH	GUDUR	MATWADA	MATWADA	GUDURU-1	961	1	2749.116	0.192	90	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	949	1	224.747	0.018	160	0.80	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	949	1	150.017	0.012	160	0.80	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	948	1	1845.197	0.129	90	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	948	1	1711.655	0.137	160	0.80	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	958	2	3044.451	0.609	1100	2.00	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	954	2	2622.761	0.184	90	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	954	2	460.317	0.032	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	APPARAJPALLY	APPARAJPALLY	GUDURU-1	951	2	1135.407	0.079	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	OTLA	GUDURU	998	3	3005.510	0.210	90	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	KARLAI	DORAVARITHIMMAPUR	GUDURU	981	3	2520.719	0.176	90	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	GUDUR	GUDURU	1002	5	839.907	0.059	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	GUDUR	GUDURU	1002	5	113.635	0.008	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	GUDUR	GUDURU	1002	5	195.776	0.014	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	GUDUR	GUDURU	1002	5	939.248	0.188	1100	2.00	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	GUDUR	GUDURU	1002	5	199.971	0.014	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	MACHRLA	MACHERLA	GUDURU	987	5	3247.143	0.649	1100	2.00	WILDLIFE
WARANGAL SOUTH	GUDUR	MACHRLA	DAMARANCH	GUDURU	987	5	769.363	0.054	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	MACHRLA	DAMARANCH	GUDURU	987	5	3005.662	0.210	90	0.70	WILDLIFE

DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP NO	SET1	LENGTH	AREA	Dia	Width	TYPE
1	2	3	4	5	6	7	8	9	10	11	12
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1037	6	2935.838	0.587	1100	2.00	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1037	6	1910.013	0.134	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1037	6	946.396	0.086	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	PONGODU	PONGODE	1040	6	315.560	0.022	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	PONGODU	PONGODE	1040	6	2642.510	0.185	75	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	PONGODU	PONGODE	1037	6	1593.871	0.112	75	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	GUDUR	GUDUR	PONGODE	1036	6	1501.390	0.105	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1044	7	2275.749	0.159	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1044	7	3410.131	0.682	1000	2.00	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1044	7	581.686	0.041	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1044	7	509.004	0.036	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	RAICHETTLAPAD	PONGODE	1042	7	1202.136	0.084	63	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	RAICHETTLAPAD	PONGODE	1042	7	491.203	0.034	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	ASHOK NAGAR	ASHOK NAGAR	KHANAPUR	681	8	2137.856	0.150	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	ASHOK NAGAR	ASHOK NAGAR	KHANAPUR	682	8	1029.061	0.072	90	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	ASHOK NAGAR	ASHOK NAGAR	KHANAPUR	669	9	1191.949	0.083	90	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1105	9	6717.503	0.672	400	1.00	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1106	9	4808.851	0.481	350	1.00	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1106	9	633.309	0.044	90	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1106	9	1308.555	0.092	63	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1081	9	2601.430	0.260	400	1.00	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	POLARAM	GUDURU	1081	9	7312.587	0.731	400	1.00	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1045	9	458.905	0.115	400	2.50	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONGONDOLA	POGALLAPALLI	PAKHAL	713	10	1910.431	0.153	200	0.80	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONGONDOLA	POGALLAPALLI	PAKHAL	713	10	811.212	0.057	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONGONDOLA	POGALLAPALLI	PAKHAL	713	10	1748.926	0.157	225	0.90	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONGONDOLA	POGALLAPALLI	PAKHAL	713	10	2320.140	0.232	315	1.00	WILDLIFE

FOREST
(CHBR)

DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	SET1	LENGTHF	AREAF	Dia	Width	TYPE
1	2	3	4	5	6	7	8	9	10	11	12
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	POGALLAPALLI	PAKHAL	713	10	292.598	0.029	315	1.00	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1102	10	3656.645	0.366	350	1.00	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	POLARAM	GUDURU	1084	10	1357.743	0.095	63	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	POLARAM	GUDURU	1084	10	1277.648	0.089	63	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	POLARAM	GUDURU	1084	10	262.300	0.018	90	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	GUDURU	1088	11	1377.530	0.096	75	0.70	WILDLIFE
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	GUDURU	1052	11	1855.693	0.130	75	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	BUTHULAPALLY	GUDURU	1052	11	738.304	0.052	75	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	BUTHULAPALLY	GUDURU	1088	11	1038.435	0.073	75	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	BUTHULAPALLY	GUDURU	1065	11	2673.953	0.187	75	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	BUTHULAPALLY	GUDURU	1065	11	1652.310	0.116	75	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	BUTHULAPALLY	GUDURU	1068	11	2018.622	0.141	75	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	KOTHAGUDA	GUDURU	1102	12	881.475	0.062	110	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	POLARAM	GUDURU	1087	12	2975.589	0.238	200	0.80	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	POLARAM	GUDURU	1085	12	1517.277	0.121	250	0.80	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	POLARAM	GUDURU	1089	12	4089.003	0.327	200	0.80	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	MADAGUDA	PUTLABHUPATHI	PANDAM	817	12	870.846	0.061	63	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	THIRMALGANDI	GUDURU	1060	12	1186.985	0.095	63	0.80	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	THIRMALGANDI	GUDURU	1059	12	579.849	0.041	63	0.70	WILDLIFE
WARANGAL SOUTH	KOTHAGUDA	KOTHAGUDA	THIRMALGANDI	GUDURU	1059	12	1356.483	0.109	160	0.80	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	POGALLAPALLI	PAKHAL	710	14	2366.931	0.166	110	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	POGALLAPALLI	PAKHAL	710	14	1573.777	0.110	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	POGALLAPALLI	PAKHAL	710	14	1190.484	0.083	125	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	MUSIMI II	PAKHAL	711	14	500.876	0.035	110	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	MUSIMI II	PAKHAL	711	14	1112.259	0.078	90	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(N)	PAKHAL	719	15	1130.382	0.079	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(N)	PAKHAL	719	15	984.401	0.069	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	POGALLAPALLI	PAKHAL EXT V	1204	15	2629.171	0.184	125	0.70	WILDLIFE

DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	SET1	LENGTHF	AREAF	Dia	Width	TYPE
1	2	3	4	5	6	7	8	9	10	11	12
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(N)	PAKHAL	726	16	344.128	0.024	90	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(N)	PAKHAL	717	16	1434.826	0.115	200	0.80	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(S)	KHANAPUR	668	16	3036.041	0.213	90	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(S)	PAKHAL	725	16	713.294	0.050	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(S)	PAKHAL	715	16	2533.155	0.177	110	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	INCHAGUDA(S)	PAKHAL	724	16	1980.888	0.139	75	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	DABEERPET	KHANAPUR	650	17	5309.141	0.425	160	0.80	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	ITKALPALLY	KHANAPUR	649	17	1357.249	0.095	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	ASHOK NAGAR	ASHOKNAGAR	KHANAPUR	660	17	1813.582	0.127	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	ASHOK NAGAR	ASHOKNAGAR	KHANAPUR	660	17	541.679	0.038	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	ASHOK NAGAR	ASHOKNAGAR	KHANAPUR	660	17	117.428	0.008	63	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	MEDAPALLY	GOVINDAPUR	PAKHAL	738	18	3678.444	0.257	110	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	PONUGONDLA	PAKHAL	693	26	2588.789	0.181	140	0.70	WILDLIFE
WARANGAL SOUTH	NARSAMPET	PONUGONDLA	PONUGONDLA	PAKHAL	694	26	3019.236	0.211	63	0.70	WILDLIFE
Wildlife Area under South Territorial Division =							158654.221	15.166			
Total Wildlife Area under (WLM Divn., Warangal +South Territorial Divn.) =							176662.353	16.508			
WARANGAL WLM	KOTHAGUDA-II	KARLAI	DORAVARIVEMPALLY	CHINTAGUDA	904	21	3701.584	0.296	160	0.80	FOREST
Eco-sensitive Area under WLM Division, Warangal =							3701.584	0.296			
WARANGAL SOUTH	KOTHAGUDA	MADAGUDA	GANGARAM	PANDAM	844	19	8141.807	0.570	75	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	PANDEM	GURJALEMOTE	PANDAM	833	19	3775.999	0.264	75	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	GUDEPADU	BAVARGONDA	PANDAM	821	20	2911.349	0.204	125	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	MADAGUDA	MADAGUDA	PANDAM	819	20	1598.741	0.112	90	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	MADAGUDA	MADAGUDA	PANDAM	819	20	1421.144	0.114	160	0.80	FOREST
WARANGAL SOUTH	KOTHAGUDA	MADAGUDA	MADAGUDA	PANDAM	819	20	1017.317	0.071	63	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	GUDEPADU	MARRIGUDA	CHINTAGUDA	904	21	3472.575	0.243	140	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	ENCLOSURE	CHINTAGUDA	870	21	1596.612	0.112	63	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	MADAGUDA	PUTLABHUPATHI	CHINTAGUDA EXT II	811	21	443.314	0.031	140	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	KAMARAM	CHINTAGUDA	908	22	2594.955	0.208	160	0.80	FOREST

DIVISION 1	RANGE 2	SECTION 3	BEAT 4	BLOCK 5	COMP_NO 6	SET1 7	LENGTH 8	AREAF 9	Dia 10	Width 11	TYPE 12
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	KAMARAM	CHINTAGUDA	910	22	766.242	0.054	63	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	KAMARAM	CHINTAGUDA	905	22	504.951	0.126	250	2.50	FOREST
WARANGAL SOUTH	KOTHAGUDA	GUDEPADU	MARRIGUDA	CHINTAGUDA	905	22	456.434	0.032	63	0.70	FOREST
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	KAMARAM	CHINTAGUDA	905	22		0.783			FOREST(OHBR)
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	MAMIDIGUDA	CHINTAGUDA	931	23	5889.376	0.412	125	0.70	FOREST
Eco-sensitive Area under Warangal South Territorial Division=								34590.816	3.336		
WARANGAL NORTH	PASARA	ALIGUDA	LINGAL	BANDAL	440	23	1927.796	0.135	125	0.70	FOREST
WARANGAL NORTH	PASARA	KODISHELLA	KODISHELLA_N	BANDAL	401	24	2172.128	0.152	63	0.70	FOREST
WARANGAL NORTH	PASARA	KODISHELLA	KODISHELLA_N	BANDAL	397	24	6668.104	0.600	63	0.90	FOREST
WARANGAL NORTH	PASARA	ALIGUDA	LINGAL	BANDAL	439	24	4039.540	0.283	63	0.70	FOREST
WARANGAL NORTH	PASARA	BANDAL	BANDAL	BANDAL	440	24	2330.998	0.163	90	0.70	FOREST
WARANGAL NORTH	PASARA	ALIGUDA	ALLIGUDA_N	BANDAL	394	25	3291.731	0.230	63	0.70	FOREST
WARANGAL NORTH	PASARA	ALIGUDA	ALLIGUDA_N	BANDAL	431	25	1791.283	0.125	63	0.70	FOREST
				BANDAL	432	25	1183.145	0.083	63	0.70	FOREST
Eco-sensitive Area under Warangal North Territorial Division=								23404.725	1.771		
Total Eco-sensitive zone Area under (WLM Divn., Warangal +South Territorial Divn. + North Territorial Divn.) =								61697.125	5.403		
Total Forest Area=(WLM Area + Eco-Sensitive zone area)=								238359.478	21.911		

Superintending Engineer
TDWSP, Circle, Warangal

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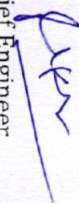
Chief Engineer,
TDWSP, Hyderabad.

Forest Area Statement (Segment-17-3-KOTHAGUDA)

FOR THE WORK "Laying of pipe lines and Construction of other structures for providing safe drinking water to Mulug,
Narsampet & Mahabubabad Constituencies, IN WARANGAL DISTRICT

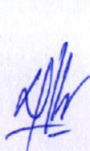
DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	NAME OF THE STRUCTURE	Area_Ha
8	7	6	5	3	4	2	1
WARANGAL SOUTH	KOTHAGUDA	KOMATLAGUDA	KAMARAM	CHINTAGUDA	905	OHBR	1.127
WARANGAL SOUTH	GUDUR	BHUPATHIPET	BHUPATHIPET	PONGODE	1045	OHBR	0.785
TOTAL AREA UNDER STRUCTURES							1.912


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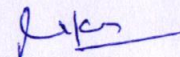
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Chief Engineer,
TDWSP, Hyderabad.

DETAILS OF SURVEY INSTRUMENTS USED

S.No	Name of the Agency	Instruments used	Persons involved	Period of Survey
1	M/s Design Group of Engineers, Hyderabad	1.DGPS make:Trimble (R4) & Leica	Mr.Ganguly-Surveyor & Ramu-Surveyor	From November 2015 to February 2016
		2.Total Station:Leica (TS 06 Plus)	Mr.M. Sandeep Reddy ,Mr.Kishore & Naresh	

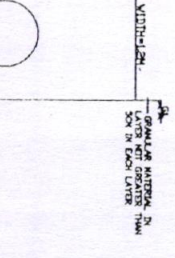
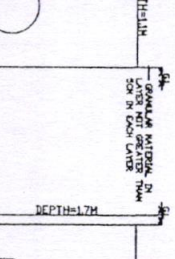
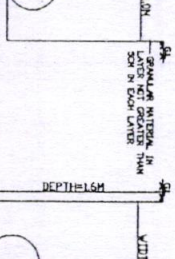
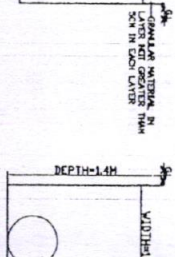
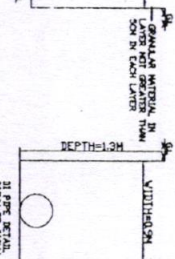
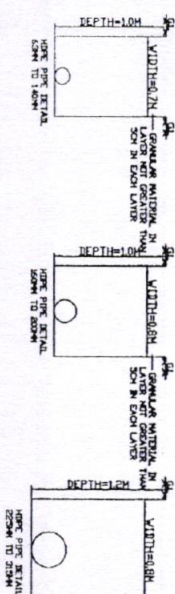

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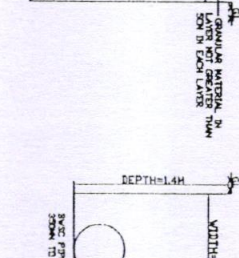
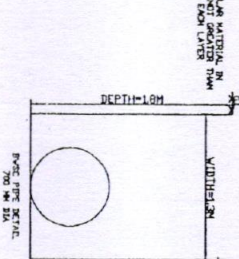
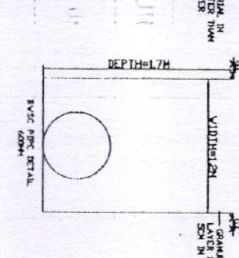
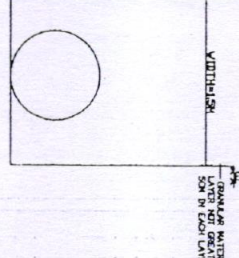
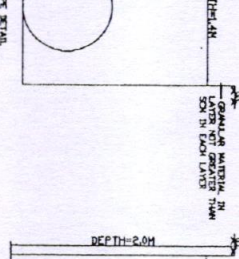
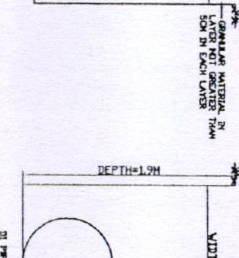
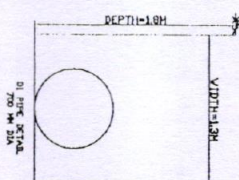

 Chief Engineer
 TDWSP, Hyderabad

TELANGANA DRINKING WATER SUPPLY PROJECT SEGMENT-17/3 - Kothaguda. DRAWING SHOWING THE PIPELINE CROSS SECTION

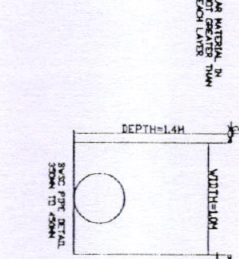
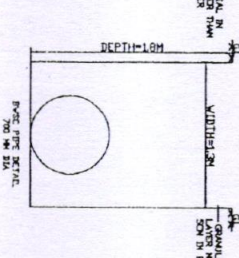
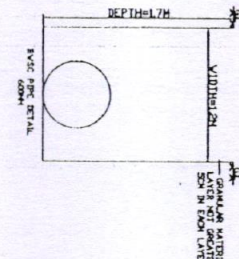
HDPE PIPES



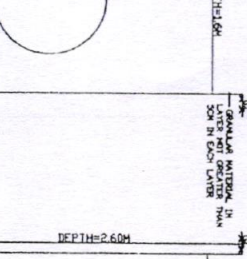
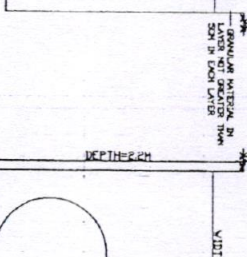
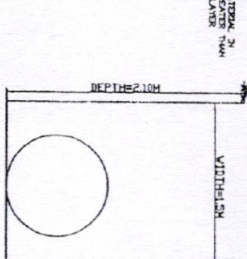
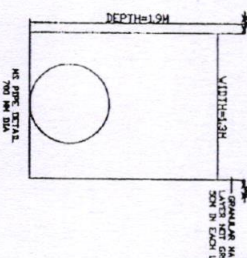
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BVSC PIPES



MS PIPES



ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SPECIFIED

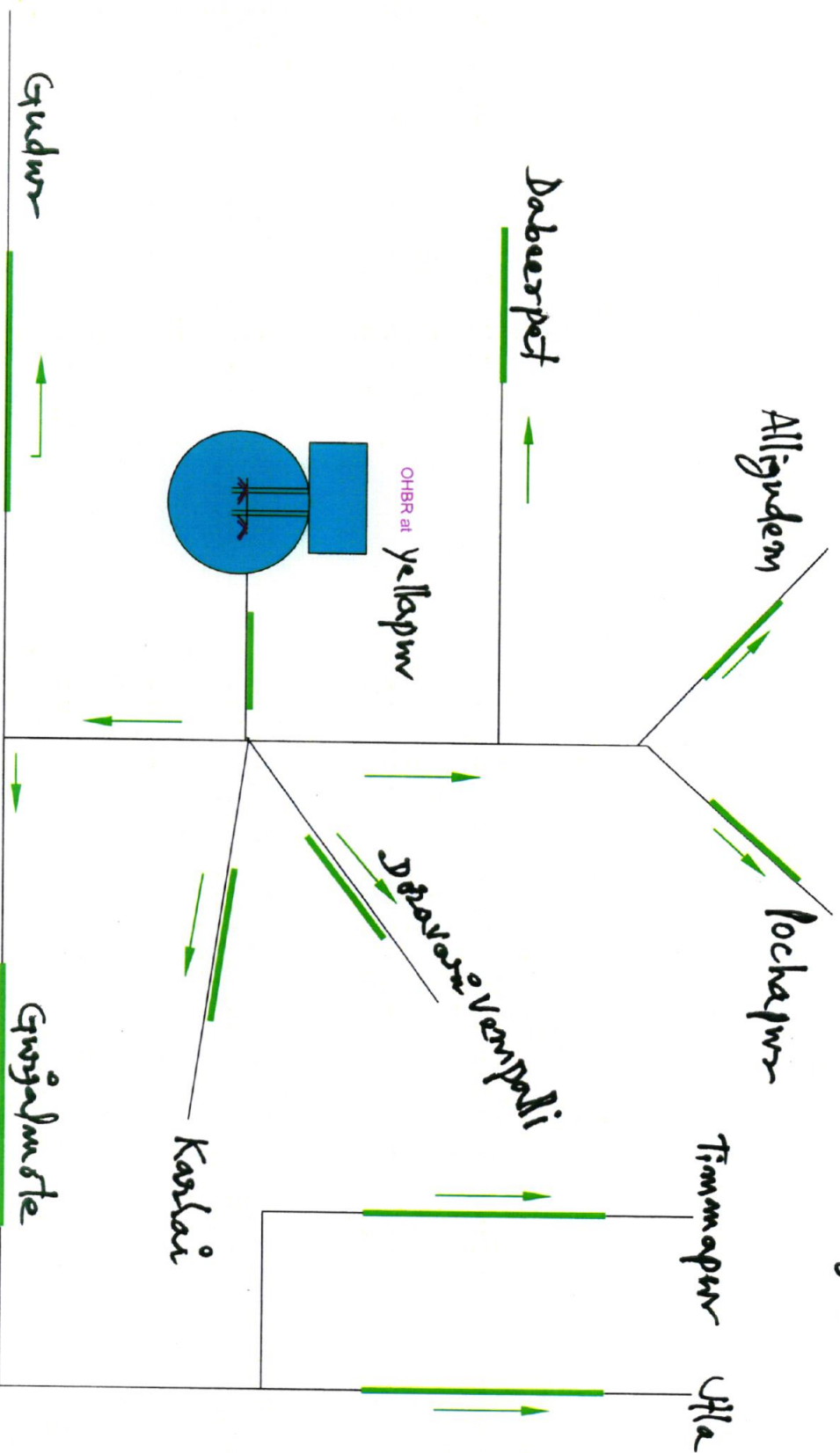
Superintending Engineer

TDWSP Circle, Warangal.

Chief Engineer

TDWSP Hyderabad.

Telangana Drinking Water Supply Project-Segment 17/3 - Kollinguda.



Superintending Engineer
TDWSP, Circle, WARANGAL;

Counter signed
Chief Engineer
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