

Telangana Drinking Water Supply Project – Adilabad

Objectives and Scope:

Telangana drinking water supply project (TDWSP) is the flagship programme of the newly constituted state of Telangana. The State Government has embarked on a vision to provide safe, adequate, permanent and sustainable water supply to rural, urban and industrial areas by 2019. Apart from water for domestic use, the project is planned to meet the water needs of commercial entities, industrial units, Special Economic Zones, etc.

The project will be integrated with the existing and ongoing water supply schemes which are sustainable. Balance surface water requirements will be planned from the proposed Telangana Drinking Water Supply Project. The requirement of water for drinking, cooking, domestic need will be taken into account at 100 liters per capita per day (LPCD) for rural areas, 135 LPCD for municipalities/Nagar Panchayaths and 150 LPCD for municipal corporations. It is planned to supply water at the door step of every household. Samithis headed by women will manage the rural water supply systems at village level.

Need of the Project

The proposed project is to supply water needs of rural, urban, institutional, commercial and industrial excluding GHMC and its surrounding habitations within ORR of Hyderabad.

The following are major challenges in the water supply which promote to go for state wide several water networks(Grid)utilizing surface water sources mainly major irrigation projects and perennial rivers.

i) Ground water depletion

One of the major problems in this sector is depletion of ground water mainly due to over exploitation and short fall in rainfall.

ii) Ground Water Quality

In parts of Telngana ground water contains high concentration of fluoride and iron deposits in the subsurface strata. With depletion of ground water, the concentration of fluoride, iron and salinity is increasing in the ground water outside range of acceptable standard limits for drinking water which leads to provide surface treated water for human consumption. Total 115 quality affected habitations are identified in the districts with excess fluoride (60 Habs), salinity (47 Habs), TDS(0Habs.), Nitrates (7 Habs.) and Iron (1 Habs).However, some of these quality affected habitations are covered in the existing schemes/ongoing schemes with limited supply of quality water.

iii) Ground water pollution

Pollution is also a critical problem both from natural resources, Industrial pollutions, Agriculture pesticides, nitrates and improper disposal of solid and liquid waste etc.,

iv) Sustainability

In water supply sector sustainability of drinking water sources and systems is a major challenge in view of demand for irrigation and adverse seasonal conditions.

v) Increasing demand

Due to change in life styles & urbanization, most of the villagers are demanding household connections and increased level of water supply at their door step. Change in perception of people for better living standards is also leading to increased demand.

vi) Rural Areas and Urban Areas

Presently separate network from even from the same water source is planned for rural areas and urban areas due to which the cost of the project is increasing as the urban areas.

NRDWP Guidelines provides for "Gradual shift from over dependence on ground water to surface water sources, and conjunctive use of ground water, surface water and rainwater".

SALIENT FEATURES OF SEGMENT - 21

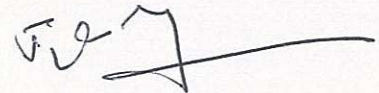
The Segment 21 covers 869 habitations spreaded over 21 Mandals and Nirmal, Adilabad Municipality in 3 Assembly constituencies namely Nirmal, Boath and Adilabad. The raw water will be collected from back waters of SRSP back waters near Local velmal village from where the water will be pumped to headwork's near Madegaon of Dilawarpur mandal. Madegaon OHBR serves Dilawarpur and Sarangapur mandals and further clear water will be pumped to the GLBR at Arepally of Neredigonda mandal to cover Boath, Neredigonda and Mamada mandals. The Clear water will be carried from from Arepally GLBR to Babuldhole GLBR to cover Ichoda, Bazarhathnur and Gudihathur mandals. Further the clear water carried from babuldhole GLBR to Adilabad BPT to cover Jainath and Belamandals. the clear water carried from Adilabad BPT to Sunkidi GLBR to cover Talamadugu and Thamsimandals.

Coverage to the Industries

There are many Industries existing and proposed in the Project Area. It is decided to provide 0.324 TMC of Water to Industries in the present Water Segment. And it is also decided to lay separate lines to meet the additional Industrial Demand in future if required directly from SRSP or any other alternate sources if available


Superintending Engineer,
RWS&S TDWSP, Nirmal-Circle.

"Counter Signed"



Chief Engineer,

RWS&S TDWSP, Hyderabad.


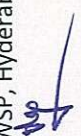


Details of survey instruments

S.No	Name of the agency	Details of instrument used	Persons involved	Duration of survey
1	Vardhaman Engineers and consultance	DGPS instrument: OMNISTAR(Trimble), LEICA	Mr.Amarendher Mr.Praveen Mr.Upendher	Nov, Dec 2015

Superintending Engineer,
TDWSP, Nirmal

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 TDWSP, Hyderabad.
 

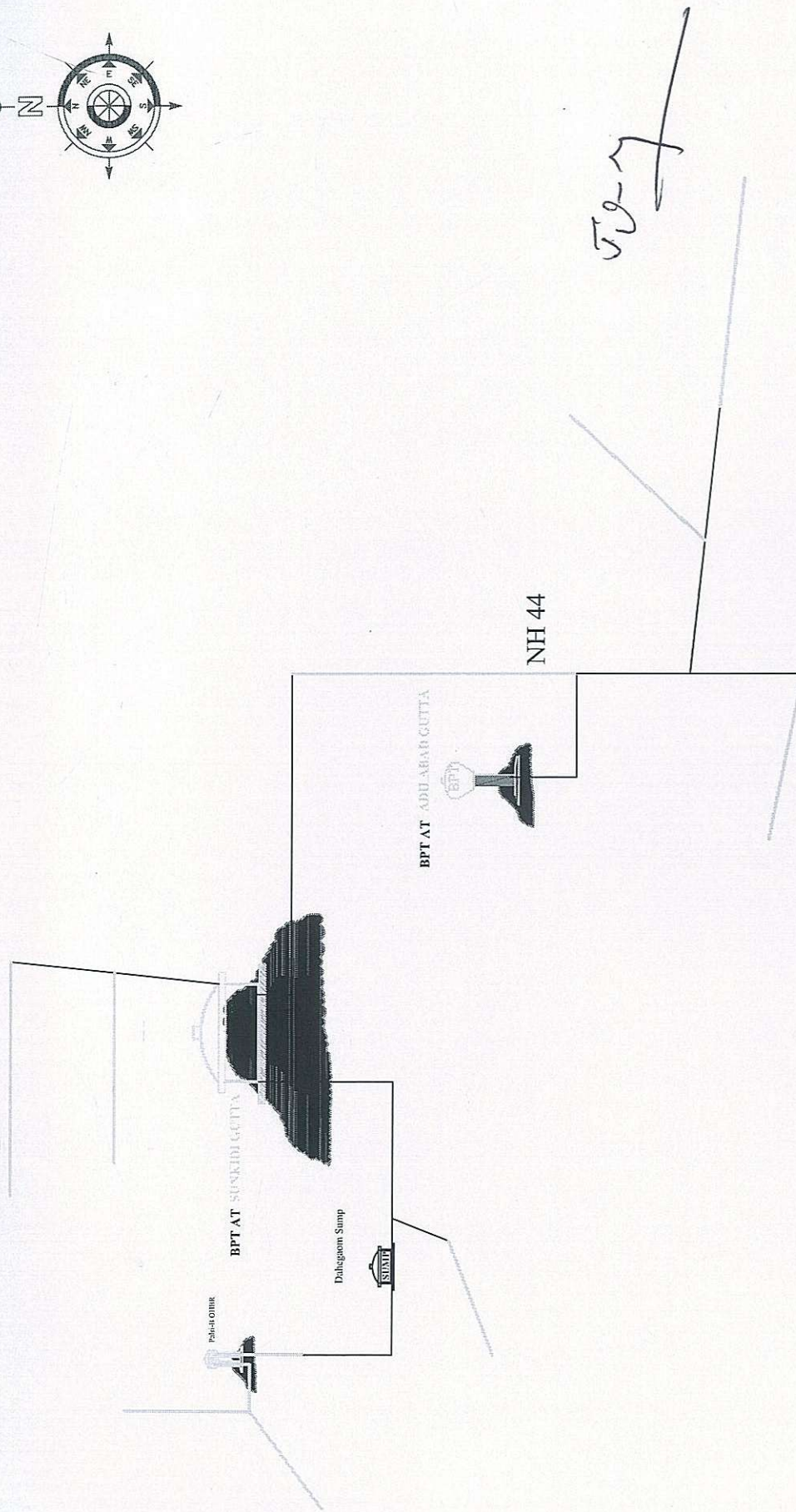
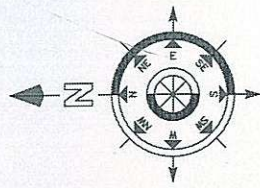
DETAILS OF FOREST AREA INVOLVED IN MAVALA SEG-21/1, ADILABAD DISTRICT

S NO	DIVISION	RANGE	SECTION	BLOCK	COMP_NO	SET	Dia	Length_mt	Width	Area_Ha
1	ADILABAD	ADILABAD	ARLI	ARLI	230	9	63	1543.136	0.7	0.108
2	ADILABAD	ADILABAD	THAMSI	TAMSI	236	8	75	3557.44	0.7	0.249
3	ADILABAD	ADILABAD	THAMSI	TAMSI	236	8	63	141.639	0.7	0.01
4	ADILABAD	ADILABAD	THAMSI	TAMSI	237	7	63	277.746	0.7	0.019
5	ADILABAD	ADILABAD	TALAMADUGU	AMBADI	225	7	63	499.028	0.7	0.035
6	ADILABAD	ADILABAD	TALAMADUGU	AMBADI	221	6	350	365.263	1.2	0.044
7	ADILABAD	ADILABAD	TALAMADUGU	AMBADI	221	6	1400	542.516	7	0.38
8	ADILABAD	ADILABAD	TALAMADUGU	AMBADI	222	6	315	963.4	1	0.096
9	ADILABAD	ADILABAD	ADILABAD	MAVALA	243	4	2000	2233.209	4	0.893
10	ADILABAD	ADILABAD	ADILABAD	MAVALA	244	4	1650	159.206	8	0.127
11	ADILABAD	ECHODA	BAZARHATHNUR	DEDRA	138	5	75	721.919	0.7	0.051
12	ADILABAD	ADILABAD	ADILABAD	MAVALA	246	4	2000	2383.408	3	0.715
13	ADILABAD	ADILABAD	ADILABAD	MAVALA	254	3	90	380.229	0.7	0.027
14	ADILABAD	ADILABAD	ADILABAD	MALKAPUR	255	3	75	785.949	0.7	0.055
15	ADILABAD	ADILABAD	ADILABAD	MALKAPUR	255	3	63	839.509	0.7	0.059
16	ADILABAD	ADILABAD	ADILABAD	MALKAPUR	255	3	75	409.548	0.7	0.029
17	ADILABAD	ECHODA	GUDIHATHNUR	HARKAI	139	2	2000	3051.328	3	0.915
18	ADILABAD	ECHODA	GUDIHATHNUR	HARKAI	139	2	63	1385.884	0.7	0.097
19	ADILABAD	INDERVELLY	MUTHNUR	SATNALA	363	1	75	590.849	0.7	0.041
20	ADILABAD	ADILABAD	ADILABAD	MAVALA	244	4	-	-	-	0.125
21	ADILABAD	ADILABAD	TALAMADUGU	AMBADI	221	6	-	-	-	0.07
TOTAL								20831.206		4.145

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TDWSP, Nirmal

Chief Engineer,
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FLOW CHART SHOWS PIPELINE IN FOREST OF MAVALA SEGMENT-21/1.

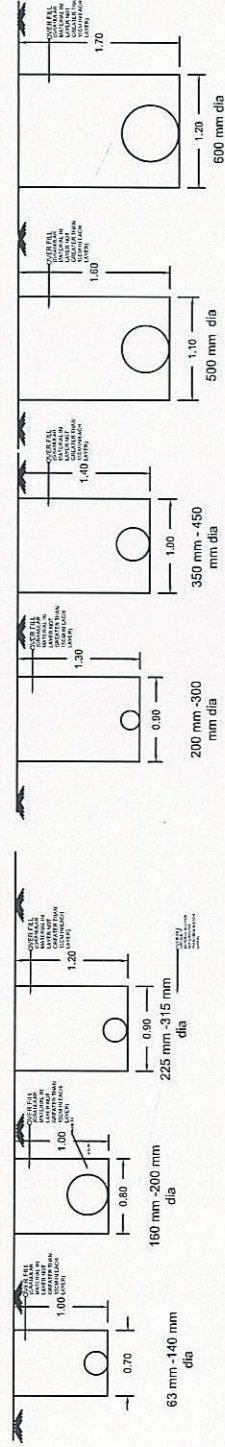


Note:
RED Line-Pipeline in forest

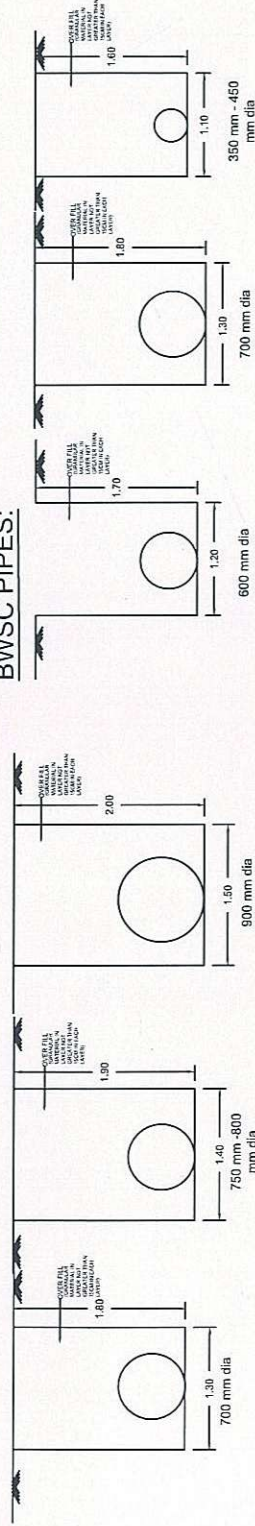
**PROJECT: TELANGANA DRINKING WATER
SUPPLY PROJECT(TDWSP-SEGMENT-21/1 MAVALA)**

TELANGANA DRINKING WATER SUPPLY PROJECT SEGMENT-21 ADIL ABAD DIST. SECTION SHOWING THE PIPELINE CROSS SECTIONS

HDPE PIPES:

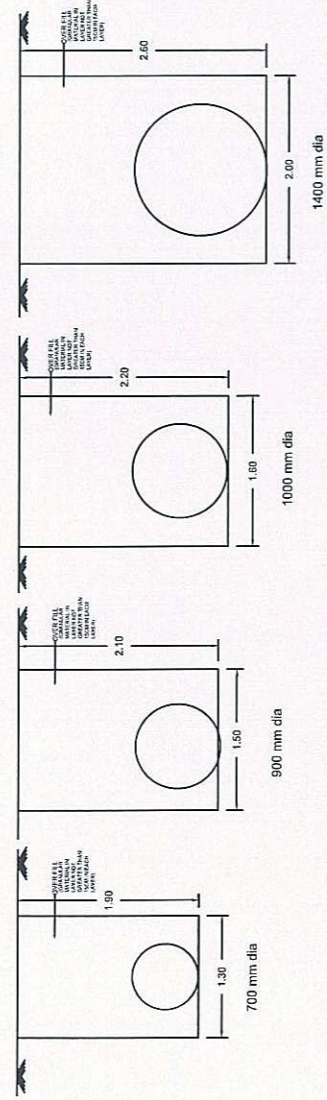


DI PIPES:



BWSC PIPES:

MS PIPES:



ALL DIMENSIONS ARE IN METRES
UNLESS OTHERWISE SPECIFIED

Fig 7

AREA STATEMENT - MAVALA - 21/1- ADILABAD						
Set	Structure type	Pipe Dia	Length in m	width m	Area_Ha	Total area in Ha
1	PIPELINE	75.00	590.849	0.70	0.041	0.041
2	PIPELINE	2000.00	3051.328	3.00	0.915	1.012
	PIPELINE	63.00	1385.884	0.70	0.097	
3	PIPELINE	75.00	785.949	0.70	0.055	0.170
	PIPELINE	63.00	839.509	0.70	0.059	
	PIPELINE	90.00	380.229	0.70	0.027	
	PIPELINE	75.00	409.548	0.70	0.029	
4	PIPELINE	2000.00	2383.408	3.00	0.715	1.860
	PIPELINE	1650.00	159.206	8.00	0.127	
	PIPELINE	2000.00	2233.209	4.00	0.893	
	BPT				0.125	
5	PIPELINE	75.00	721.919	0.70	0.051	0.051
6	PIPELINE	315.00	963.400	1.00	0.096	0.590
	PIPELINE	350.00	365.263	1.20	0.044	
	PIPELINE	1400.00	542.516	7.00	0.380	
	OHBR				0.0700	
7	PIPELINE	63.00	499.028	0.70	0.035	0.054
	PIPELINE	63.00	277.746	0.70	0.019	
8	PIPELINE	75.00	3557.440	0.70	0.249	0.259
	PIPELINE	63.00	141.639	0.70	0.010	
9	PIPELINE	63.00	1543.136	0.70	0.108	0.108
TOTAL			20831.206		4.145	4.145

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