

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

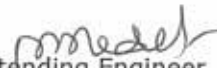
Presently separate network from even from the same water source is planned for rural areas and urban areas due to which the cost of the project is increasing as the urban areas.

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 - 22

The Segment 22 covers 1819 habitations spreaded over 21 Mandals and Kaghaznagar & Bellampally Municipalities in 4 Assembly constituencies namely Sirpur, Bellampalli, Asifabad & Khanapur. The raw water will be collected from Komarambheem reservoir near Ada village from where the water will be pumped to headwork's near Manikguda of Asifabad Mandal & Dhanora of Kerimeri Mandal. Manikguda Gutta 1600KL GLBR serves 11 Mandals namely Bellampalli, Tandur, Bheemini, Nennel, Vemanapally, Kasipet, Kaghaznagar, Dahegaon, Sirpur T, Kowatala, Bejjur and Manikguda Gutta 350 KL GLBR serves 3 mandals namely Asifabad, Wankidi, Rebbana. Whereas the clear water sump at Dhanora Head works serves 7 mandals namely Kerimeri, Jainoor, Sirpur U, Tiryani, Narnoor, Utnoor, Indervelly.


Executive Engineer
RWS&S TDWSP
Asifabad


Superintending Engineer
RWS&S TDWSP,
Nirmal (Circle).


"Counter Signed"


Chief Engineer
RWS&S TDWSP, Hyderabad

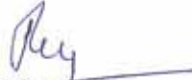
Details of survey instruments

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 & Jan 2016


Executive Engineer,
TDWSP, Asifabad


Superintending Engineer,
TDWSP, Nirmal

"Counter Signed"


Chief Engineer,
TDWSP, Hyderabad.

AREA DETAILS - SEGMENT - 22 /15 - ADBD						
Set	Structure type	Pipe Dia	width m	Length in m	Area_Ha	Total area in Ha
1	PIPELINE	90.000	0.70	5093.200	0.357	0.357
2	PIPELINE	180.000	0.90	1486.710	0.134	1.402
	PIPELINE	140.000	0.70	12462.400	0.872	
	PIPELINE	63.000	0.70	1696.510	0.119	
	PIPELINE	300.000	4.00	36.249	0.014	
	OHBR	-	-	-	0.036	
	OHBR	-	-	-	0.227	
3	PIPELINE	140.000	0.70	1525.260	0.107	0.875
	PIPELINE	140.000	0.70	1798.860	0.126	
	PIPELINE	140.000	0.70	5767.260	0.404	
	PIPELINE	75.000	0.70	2163.490	0.151	
	PIPELINE	300.000	1.20	40.773	0.005	
	OHBR				0.082	
4	PIPELINE	125.000	0.70	9243.210	0.647	1.216
	PIPELINE	75.000	0.70	3459.690	0.242	
	PIPELINE	63.000	0.70	360.534	0.025	
	PIPELINE	63.000	0.70	564.757	0.040	
	PIPELINE	63.000	0.70	60.424	0.004	
	PIPELINE	63.000	0.70	53.984	0.004	
	PIPELINE	300.000	4.00	90.470	0.036	
	PIPELINE	300.000	4.00	44.976	0.018	
	GLBR	-	-	-	0.064	
	SUMP	-	-	-	0.069	
	OHBR	-	-	-	0.067	
5	PIPELINE	63.000	0.70	2407.860	0.169	0.561
	PIPELINE	90.000	0.70	1523.280	0.107	
	PIPELINE	63.000	0.70	3357.000	0.235	
	PIPELINE	63.000	0.70	157.239	0.011	
	PIPELINE	300.000	1.20	69.593	0.008	
	SUMP	-	-	-	0.031	
6	PIPELINE	150.000	0.70	613.559	0.043	0.393
	PIPELINE	140.000	0.70	1643.290	0.115	
	PIPELINE	63.000	0.70	1852.230	0.130	
	PIPELINE	600.000	0.70	1493.270	0.105	
TOTAL				59066.078	4.804	4.804

DETAILS OF FOREST AREA INVOLVED IN DHANORA SEG-22/15, ADILABAD DISTRICT

S.NO	DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	Set	Dia	Length_mt	Width_mts	Area
1	2	3	4	5	6	7	8	9	10	11	12
1	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	7	1	90	5093.200	0.70	0.357
2	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	1	2	140	12462.400	0.70	0.872
3	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	5	2	63	1696.510	0.70	0.119
4	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	4	2	300	36.249	4.00	0.014
5	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	15	2	180	1486.710	0.90	0.134
6	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	18	3	140	5767.260	0.70	0.404
7	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	20	3	300	40.773	1.20	0.005
8	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	34	3	140	1798.860	0.70	0.126
9	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	34	3	75	2163.490	0.70	0.151
10	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	15	3	140	1525.260	0.70	0.107
11	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	125	9243.210	0.70	0.647
12	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	63	564.757	0.70	0.040
13	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	63	60.424	0.70	0.004
14	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	63	53.984	0.70	0.004
15	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	300	90.470	4.00	0.036
16	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	300	44.976	4.00	0.018
17	BELLAMPALLY	ASIFABAD	DEVAPUR	SANGVI	MANIKGARH[WEST]	23	4	75	3459.690	0.70	0.242
18	BELLAMPALLY	ASIFABAD	DEVAPUR	SANGVI	MANIKGARH[WEST]	23	4	63	360.534	0.70	0.025
19	BELLAMPALLY	ASIFABAD	INDAPUR	INDAPUR	MANIKGARH[WEST]	27	5	63	3357.000	0.70	0.235
20	BELLAMPALLY	ASIFABAD	INDAPUR	INDAPUR	MANIKGARH[WEST]	27	5	63	157.239	0.70	0.011
21	BELLAMPALLY	ASIFABAD	INDAPUR	INDAPUR	MANIKGARH[WEST]	27	5	300	69.593	1.20	0.008
22	BELLAMPALLY	ASIFABAD	DEVAPUR	SANGVI	MANIKGARH[WEST]	32	5	63	2407.860	0.70	0.169
23	BELLAMPALLY	ASIFABAD	INDAPUR	INDAPUR	MANIKGARH[WEST]	29	5	90	1523.280	0.70	0.107
24	BELLAMPALLY	ASIFABAD	INDAPUR	INDAPUR	MANIKGARH[WEST]	68	6	63	1852.230	0.70	0.130
25	BELLAMPALLY	ASIFABAD	KERAMERI	DHANORA	KUKADHATTI	67	6	140	1643.290	0.70	0.115
26	BELLAMPALLY	ASIFABAD	KERAMERI	DHANORA	DHANORA	48	6	600	1493.270	0.70	0.105
27	BELLAMPALLY	ASIFABAD	INDAPUR	GOYEGOAN	DHANORA	58	6	150	613.559	0.70	0.043
						TOTAL			59066.078		4.228

S.NO	DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	Set	STRUCTURE	Area in Ha
1	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	4	2	OHBR	0.227
2	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	9	2	OHBR	0.036
3	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	20	3	OHBR	0.082
4	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	GLBR	0.064
5	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	SUMP	0.069
6	BELLAMPALLY	ASIFABAD	DEVAPUR	KARANGJIWADA	MANIKGARH[WEST]	19	4	OHBR	0.067
7	BELLAMPALLY	ASIFABAD	INDAPUR	INDAPUR	MANIKGARH[WEST]	27	5	SUMP	0.031
						TOTAL			0.576

Executive Engineer
TDWSP, Asifabad

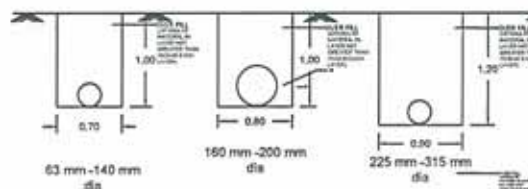
Superintending Engineer,
TDWSP, Nirmal

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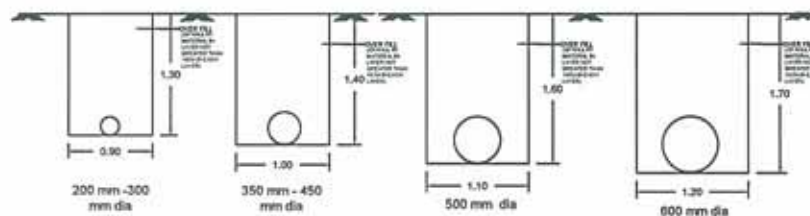
Chief Engineer,
TDWSP, Hyderabad

TELANGANA DRINKING WATER SUPPLY PROJECT SEGMENT- 22 ADIL ABAD DIST. SECTION SHOWING THE PIPELINE CROSS SECTIONS

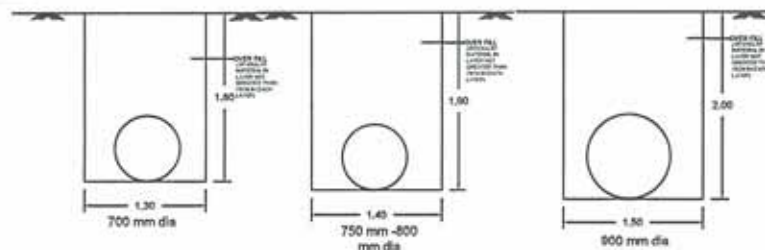
HDPE PIPES:



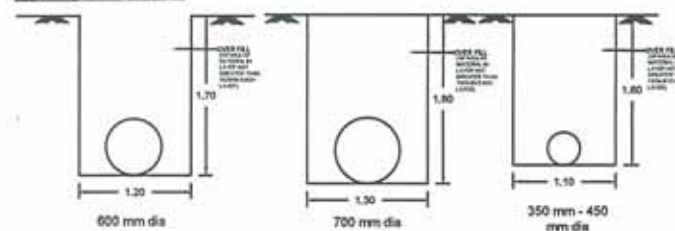
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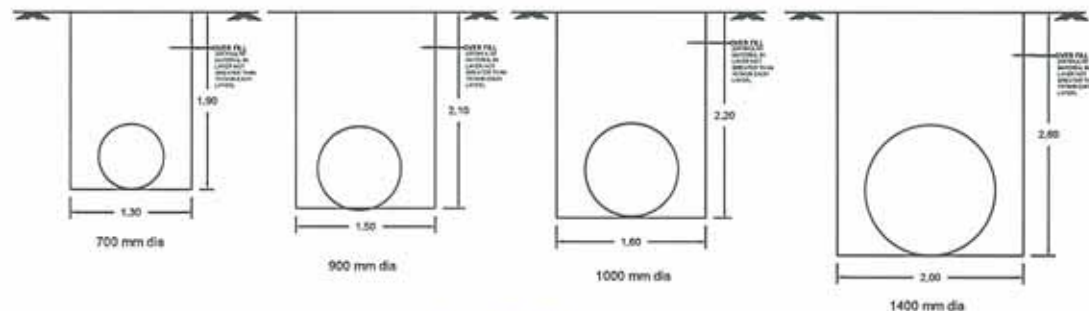
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BWSC PIPES:



MS PIPES:



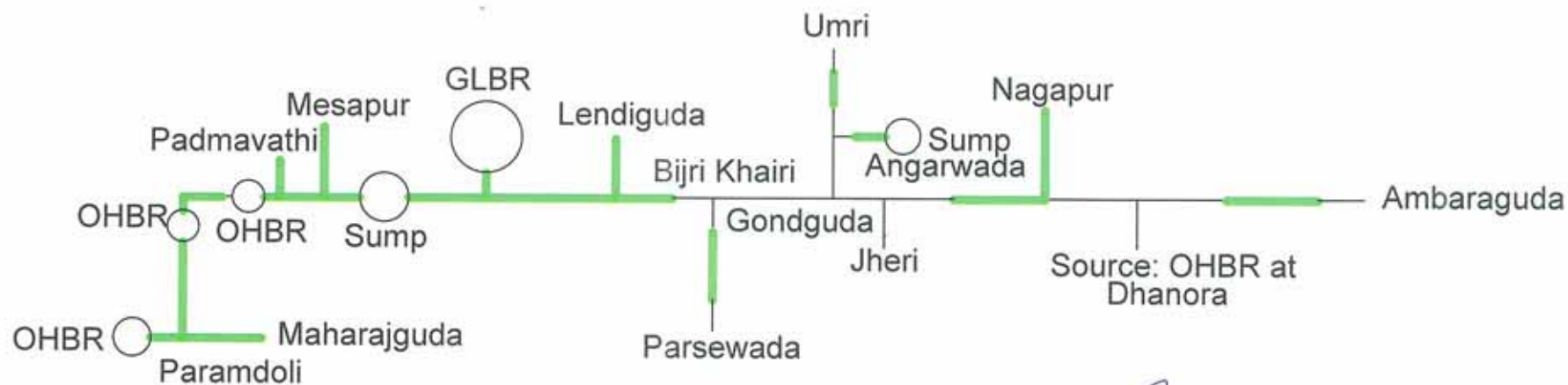
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FLOWCHART SHOWING PIPELINE UNDER DHANORA SEGMENT-22/15
ADILABAD DISTRICT



Note:

Greenline - Pipeline in forest