

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

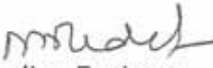
Presently separate network from even from the same water source is planned for rural areas and urban areas due to which the cost of the project is increasing as the urban areas.


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).

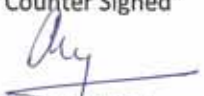
"Counter Signed"

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 /14 - ADBD						
Set	Structure type	Pipe Dia	width m	Length in m	Area_Ha	Total area in Ha
1	PIPELINE	75.000	0.70	1983.850	0.139	0.583
	PIPELINE	63.000	0.70	1089.310	0.076	
	PIPELINE	300.000	4.00	12.664	0.005	
	PIPELINE	600.000	5.00	203.772	0.102	
	OHBR	-	-	-	0.024	
	OHBR	-	-	-	0.237	
2	PIPELINE	150.000	0.90	270.810	0.024	0.342
	PIPELINE	150.000	0.90	976.788	0.088	
	PIPELINE	150.000	0.90	1086.830	0.098	
	PIPELINE	350.000	1.00	822.474	0.082	
	PIPELINE	150.000	0.90	550.098	0.050	
3	PIPELINE	63.000	0.70	478.517	0.033	0.237
	PIPELINE	63.000	0.70	157.201	0.011	
	PIPELINE	63.000	0.70	422.796	0.030	
	PIPELINE	63.000	0.70	649.504	0.045	
	PIPELINE	125.000	0.70	1025.760	0.072	
	PIPELINE	125.000	0.70	292.499	0.020	
	PIPELINE	90.000	0.70	365.889	0.026	
4	PIPELINE	75.000	0.70	3426.990	0.240	0.364
	PIPELINE	63.000	0.70	356.773	0.025	
	PIPELINE	75.000	0.70	885.940	0.062	
	PIPELINE	63.000	0.70	90.316	0.006	
	PIPELINE	63.000	0.70	445.766	0.031	
5	PIPELINE	63.000	0.70	632.638	0.044	0.185
	PIPELINE	300.000	4.00	77.506	0.031	
	PIPELINE	300.000	4.00	95.950	0.038	
	GLBR	-	-	-	0.036	
	OHBR	-	-	-	0.036	
TOTAL				16400.641	1.711	1.711

now

moder

By

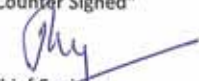
DETAILS OF FOREST AREA INVOLVED IN WAGAITHANDA SEG-22/14, ADILABAD DISTRICT

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	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	347	1	75	1983.850	0.70	0.129
2	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	347	1	300	12.664	4.00	0.005
3	ADILABAD	INDERVELLY	MUTHNUR	MUTHNOOR	SATNALA	359	1	63	1089.310	0.70	0.076
4	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	DHANORA_II	369	1	600	203.772	5.00	0.102
5	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	376	2	150	1086.830	0.90	0.098
6	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	379	2	150	270.810	0.90	0.024
7	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	379	2	150	976.788	0.90	0.088
8	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	377	2	350	822.474	1.00	0.082
9	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	380	2	150	550.098	0.90	0.050
10	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	383	3	63	157.201	0.70	0.011
11	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	383	3	90	365.889	0.70	0.026
12	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	374	3	63	422.796	0.70	0.030
13	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	374	3	125	1025.760	0.70	0.072
14	ADILABAD	INDERVELLY	PULIMADUGU	WADGAON	WADAGOAN	374	3	125	292.499	0.70	0.020
15	ADILABAD	INDERVELLY	WAIPET	POCHAMPALLY(N)	UTNOOR	387	3	63	478.517	0.70	0.033
16	ADILABAD	INDERVELLY	WAIPET	POCHAMPALLY(N)	UTNOOR	387	3	63	649.504	0.70	0.045
17	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	DHANORA_II	370	4	75	3426.990	0.70	0.240
18	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	DHANORA_II	370	4	63	356.773	0.70	0.025
19	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	DHANORA_II	370	4	63	445.766	0.70	0.031
20	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	RAMPUR	371	4	75	885.940	0.70	0.062
21	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	RAMPUR	371	4	63	90.316	0.70	0.006
22	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	345	5	63	632.638	0.70	0.044
23	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	344	5	300	77.506	4.00	0.031
24	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	344	5	300	95.950	4.00	0.038
						TOTAL			16400.641		1.378

S.NO	DIVISION	RANGE	SECTION	BEAT	BLOCK	COMP_NO	Set	STRUCTURE	Area in Ha
1	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	347	1	OHBR	0.024
2	ADILABAD	INDERVELLY	PULIMADUGU	DHANORA	DHANORA_II	369	1	OHBR	0.237
3	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	344	5	GLBR	0.036
4	ADILABAD	INDERVELLY	INDERVELLY	INDERVELLY	SATNALA	344	5	OHBR	0.036
						TOTAL			0.333

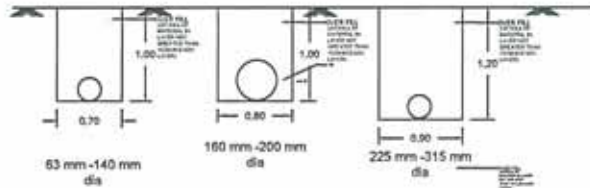

Executive Engineer
TDWSP, Asifabad


Superintending Engineer,
TDWSP, Nirmal

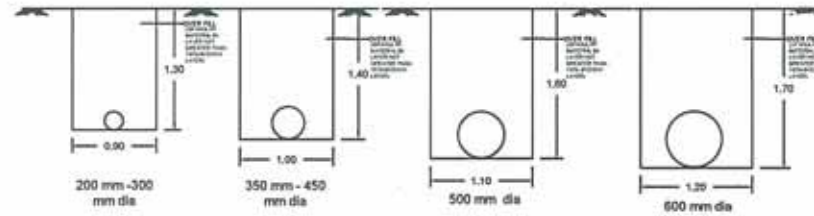
'Counter Signed"

Chief Engineer,
TDWSP, Hyderabad

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

HDPE PIPES:



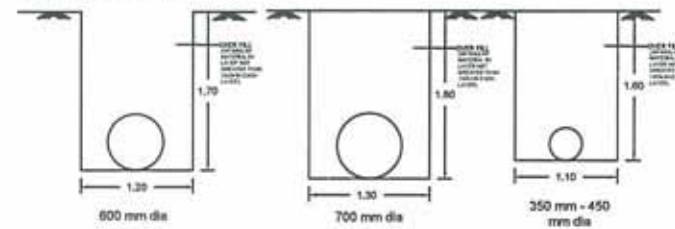
DI PIPES:



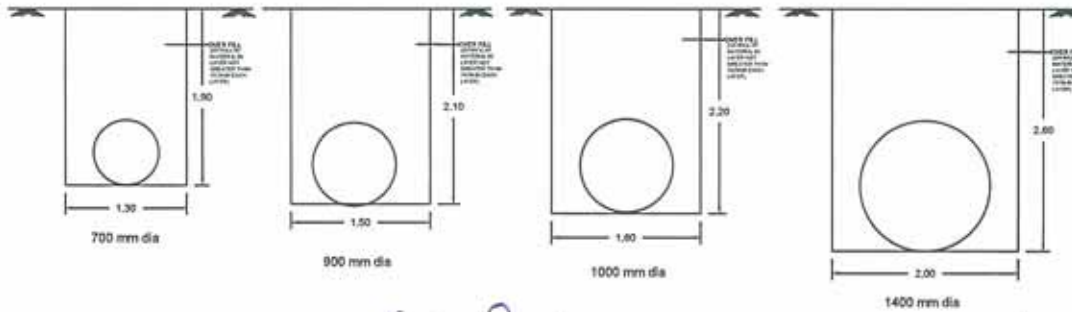
DI PIPES:



BWSC PIPES:



MS PIPES:



ALL DIMENSIONS ARE IN METRES
UNLESS OTHERWISE SPECIFIED

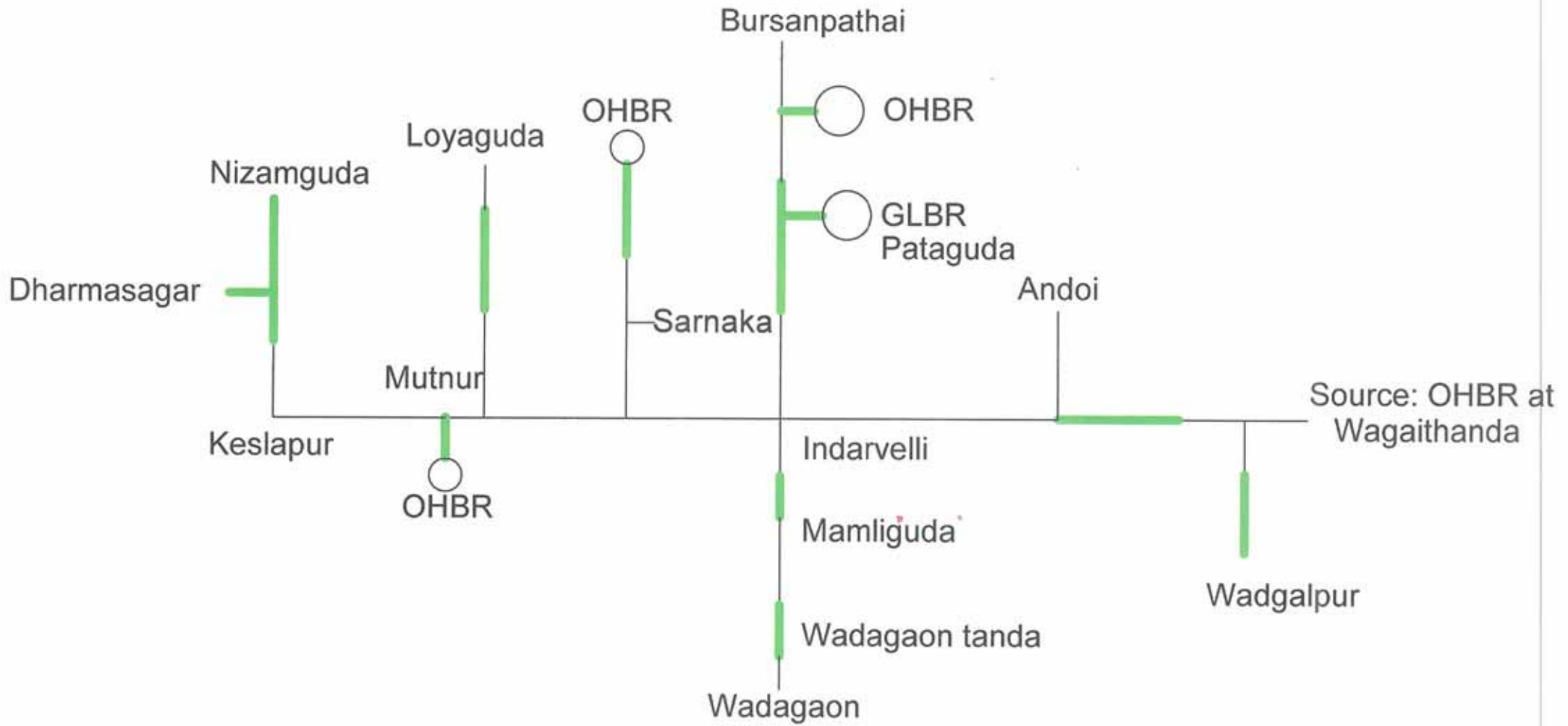
Red

mreddy

dy

FLOWCHART SHOWING PIPELINE UNDER WAGAITHANDA SEGMENT-22/14

ADILABAD DISTRICT



Note:
Greenline - Pipeline in forest

Reddy

Reddy

Reddy