

Detailed Note of the Project

Est. Cost : Rs. 750.00 Crores

Scope:-

The Government of Telangana has taken up Telangana Drinking Water Project with a view to Provide Safe drinking water to each and every house hold in all the habitations by providing tap connections to all the households. As part of the above project in order to achieve the goal of providing tap connections to each house hold and to ensure supply of safe drinking water to all habitations @ 100 lpcd for Rural areas it is necessary to upgrade existing facilities and also to provide additional transmission lines and infrastructure facilities to enhance supply rate to 100 Lpcd from existing 40 to 55 Lpcd.

SOURCE

The existing CPWS Scheme have been considered to the extent of availability and dependability and the additional required supply is supplemented from proposed GRID at Peddareddipet drawing water from Back water of Singoor dam on Manjira river in Medak district having a storage capacity of 29.50 TMC

COVERAGE

Medak segment is proposed to cover 14 rural mandals namely Kalher, Kangti, Narayankhed, Manoor, Shankerampet (A) of Narayankhed Constituency, Andole, Pulkal, Alladurg, Regode and Tekmal of Andole Constituency and Papannapet, Medak, Shankerampet (R) and Ramayampet of Medak Constituency and Medak Municipality including Jogipet Nagarapanchayath.

Design Criteria

It is proposed to supply Safe Drinking Water to all rural habitations @ 100 Lpcd and Urban population @135Lpcd. Projected year is 2048 and the rate of growth is considered @ 0.08% for Rural water areas and 2% for Urban areas. Accordingly ultimate rural population 9,99,478 and Urban population of 1,43,318 with a total population of 11,42,796 is considered. 10% quantity of water is also considered for industrial purpose.

Technical Parameters

Details of the Source:

Source	:: Singur Reservoir
Location	:: Near Peddareddypet in Pulkal mandal
River	:: Manjira River
TBL	:: 527.85 m
Full reservoir level	:: 523.60 m
Maximum water level	:: 523.60 m
Dead storage level	:: 510.00 m
Dead storage capacity	:: 0.70 TMC
Full capacity	:: 29.91 TMC

Intake well size

:: 30x12 Mtr including Nizamabad Grid for 93,654 Lpm

FVL of Pump set	:: 502.00 Mtr
End Level (Aerator in filter beds)	:: 534.00 Mtr
RSF capacity	:: 90.0 MLD
Raw water proposed pumps	:: 3 Nos 375 HP VT Pump set (One No. standby)
Clear water Sump capacity	:: 9125KL at Peddareddipet
Clear water pumps capacity to OHBR	:: 7 Nos 300HP (2 Nos stand by)
Pump house size	:: 50x12mtr
Clear water pumping main from sump to OHBR	:: 5.00 Km with 1100mm dia DI K9
OHBR at Raipad	:: 1200KL Capacity GL 560.00mt and MWL 590.00mt

I. Tapping points on Trunk mains

For providing Safe Drinking water to 5 Mandals of Narayankhed Constituency & Part of Alladurg and Regode mandals, the first tapping on the trunk main is proposed at Neredigunta junction (i.e) 6Km from Raipad OHBR. Existing OHBR's at Palvanha (60KL, 20mts staging+ 560mts) & Watpally (60KL, 30mts staging+ 567mts) are proposed to cater the needs and part of Alladurg & part of Regode mandals, 400KL, 18mts (+) 570mts MWL OHBR proposed at Tadipally will cover the five mandals of Naraynkhed constituency by gravity.

II. Tapping points on Trunk mains

To providing Safe Drinking water to the 21 habitations of Alladurg mandal, Second tapping point at Alladurg junction is proposed on Trunk main with existing 60KL, 15mtrs staging GL 540 mts OHBR (MWL:555mts). This point is located at 25Km from Raipad OHBR.

III. Tapping points on Trunk mains

To providing Safe Drinking water to Tekmal mandal and Papannapet mandals, 350KL capacity 30mts staging GL 510, MWL 540mts OHBR is proposed at Tekmal gutta. The tapping point is situated at 6.0Km from Bodmatpally Junction.

IV. Balance trunk main

450mm dia DI K7 pipe is proposed to cover rural population of Medak, Ramayampet and Shankerampet @ mandals including Urban of Population of Medak municipality. It is proposed to give, the total demand of Medak municipal population at the Single point proposed by the Public Health authority in 448.00mts level.

V. Coverage of Jogipet Nagarapanchayath, Pulkal (Part) and Andole (Part)

To cover the urban population of Jogipet Nagarapanchayath and rural population of Pulkal mandal (part) and Andole mandal (Part), it is proposed to tapping point from Raipahad OHBR for Jogipet Municipality and 75 habitations in Pulkal and Andole Mandals

VI Coverage of Shankerampet @ and Ramayampet mandals

As per the worked out Hydraulic statement, it is observed that the gravity trunk main is ending at Pathoor sump of Medak mandal (+514.00 mts) level and another segment ending at Rachpally sump of Medak mandal (+482.00 mts) level. Hence, 1650.00 KL capacity sump at Pathoor is proposed to cater the needs of Shamnapur OHBR and Akkannapet OHBR to cover the part of Medak mandal and Part of Ramayampet mandal. 600KL sump at Rachpally is proposed to cater the needs of part of Medak and Part of Shankerampet (R) habitations.

In addition to the above provisions, the following components are included in the detailed estimate alongwith the detailed sub-estimates.

I

OHBRs

- 1 Construction of 1200KL, 30m staging OHBR at Raipad.
- 2 Construction of 400 KL, 20m staging OHBR at Tatipally
- 3 Construction of 350 KL, 30m staging OHBR in Tekmal.
- 4 Construction of 40 KL, 30m staging OHBR at Minpur Gutta.
- 5 Construction of 40 KL, 30m staging OHBR at Chitriyal X Road
- 6 Construction of 40 KL, 30m staging OHBR at Machavaram
- 7 Construction of 40 KL, 30m staging OHBR at Minpur Gutta.
- 8 Construction of 40 KL, 30m staging OHBR at Lingsanpally.
- 9 Construction of 40 KL, 30m staging OHBR at Ellugutta.

- 10 Construction of 40 KL, 30m staging OHBR at Rajpet.
- 11 Construction of 40 KL, 30m staging OHBR at Gavvalapally.
- 12 Construction of 40 KL, 30m staging OHBR at Mirjapally.
- 13 Construction of 40 KL, 30m staging OHBR at Danthepally.
- 14 Construction of 60 KL, 30m staging OHBR at Padmarayunigutta.
- 15 Construction of 60 KL, 30m staging OHBR at Akkanapet.
- 16 Construction of 60 KL, 30m staging OHBR at Bagirthipally.
- 17 Construction of 90 KL, 30m staging OHBR at Komatpally.
- 18 Construction of 400 KL, 18m staging OHBR at Thatipally X Road.
- 19 Construction of 40 KL, 23m staging OHBR at Borancha.
- 20 Construction of 40 KL, 18m staging OHBR at Makthapur X Road.

II

Sumps

- 21 Construction of 2000 KL Sump at Usarikapally
- 22 Construction of 1650 KL Sump at Pathur.
- 23 Construction of 900 KL Sump at Rajpally
- 24 Construction of 40 KL Sump at Katrial.
- 25 Construction of 100 KL Sump at Lingasanpally.
- 26 Construction of 800 KL Sump at Shamnapur.
- 27 Construction of 300 KL Sump at Jakkanapet.
- 28 Construction of 60 KL Sump at Palvatla.
- 29 Construction of 60 KL Sump at Sangupet
- 30 Construction of 40 KL Sump at Manchiryal T
- 31 Construction of 20 KL Sump at GopyaThanda.
- 32 Construction of 200 KL Sump at Yelgoi.
- 33 Construction of 40 KL Sump at Burgupally Thanda.
- 34 Construction of 10 KL Sump at Bandranpally.
- 35 Construction of 200 KL Sump at Yelgoi.

III

Pump houses

- 36 Construction of Pump House at Usarikapally
- 37 Construction of Pump House at Pathur
- 38 Construction of Pump House at Rajpally
- 39 Construction of Pump House at Palvatla
- 40 Construction of Pump House at Sangupet
- 41 Construction of Pump House at Manchiryal T
- 42 Construction of Pump House at Katrial
- 43 Construction of Pump House at Lingasanpally
- 44 Construction of Pump House at Komatpally
- 45 Construction of Pump House at Jakkanapet
- 46 Construction of Pump House at Burgupally
- 47 Construction of Pump House at Bandranpally
- 48 Construction of Pump House at Gopyathanda
- 49 Construction of new Intakewell and Foot-bridge to CPWS Kangti.
- 50 Construction of new Intakewell and Foot-bridge to CPWS Karajgutthi.

IV**Pipelines**

- 51 Constriction of Pipelines in Main Grid
- 52 Constriction of Pipelines in Andole Constituency
- 53 Constriction of Pipelines in Narayankhed Constituency
- 54 Constriction of Pipelines in Medak Constituency

VII**Clear water****Pumpsets****HSC Pump sets**

55	At Ghatpally	280.00	HP
56	At Pathur	300.00	HP
57	At Pathur	180.00	HP
58	At Manchiryal Tanda	5.00	HP
59	At Sangupet	10.00	HP
60	At Palvatla	20.00	HP
61	At Gangavar X Road	25.00	HP
62	At Komatpally	150.00	HP
63	At Lingasanpally	15.00	HP
64	At Jakkanapet	60.00	HP
65	At Rajpally	140.00	HP
66	At Katrial	5.00	HP
67	At Yelgoi X Road	30.00	HP
68	At Burgupally Thanda	5.00	HP
69	At Bandranpally	5.00	HP
70	At Gopya Thanda	7.50	HP

1237.50

Turn over Tax @ 5%

Labour Cess @ 1%

Provision towards land Acquisition.

Provision towards SCADA system

Provision towards O&M

Provision for Price variation at 10%

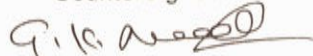
Provision towards Power Supply

LS for other unforeseen items of work.



Executive Engineer
T.D.W.S.P. Division Medak

CounterSigned



Chief Engineer
Hyderabad



Superintending Engineer
TDWSP Circle Sangareddy

DETAILS OF FOREST AREA INVOLVED IN SINGURU-MEDAK SEGMENT 8/2 MEDAK DISTRICT

S. No.	Division	Range	Section	Beat	Compt. No	Set. No	Stretch	Details	Pipe Dia in 'mm'	Length in m'	Width in 'm'	AREA IN SQ M	Pipeline Area in 'ha'	Structu res Area in 'ha'	Total Area in 'Ha'
1	MEDAK (T)	RAMAYAMPET	PATHUR	GANGAPOOR	5999	8	Pipeline	Pipeline	400	2283.725	1.100	2512.098	0.251	0.000	0.251
2	MEDAK (T)	RAMAYAMPET	AKKANAPET	AKKANAPET	5999	10	Pipeline	Pipeline	400	1378.479	1.100	1516.327	0.152	0.000	0.152
3	MEDAK (T)	RAMAYAMPET	AKKANAPET	AKKANAPET	5999	10	Pipeline	Pipeline	225	318.085	1.000	3118.085	0.312	0.000	0.312
4	MEDAK (WLM)	POCHARAV	POCHARAV	BURUGUPALLY	93	6	Pipeline	Pipeline	63	703.033	0.700	492.123	0.049	0.000	0.049
5	MEDAK (WLM)	MEDAK	MEDAK W	BHOOTPUR	81	5	Pipeline	Pipeline	200	7115.116	1.000	7115.116	0.712	0.000	0.712
6	MEDAK (WLM)	MEDAK	MEDAK W	BHOOTPUR	82	5	Pipeline	Pipeline	180	308.519	0.800	246.8952	0.025	0.000	0.025
7	MEDAK (T)	RAMAYAMPET	PATHUR	GANGAPOOR	111	7	Pipeline	Pipeline	180	1832.150	1.000	1832.15	0.183	0.000	0.183
8	MEDAK (WLM)	MEDAK	MEDAK W	BHOOTPUR	83	5	Pipeline	Pipeline	90	715.570	0.800	572.456	0.057	0.000	0.057
9	MEDAK (T)	RAMAYAMPET	PATHUR	GANGAPOOR	116	8	Pipeline	Pipeline	400	519.321	1.100	571.2531	0.057	0.000	0.057
10	MEDAK (T)	RAMAYAMPET	PATHUR	GANGAPOOR	118	8	Pipeline	Pipeline	400	994.342	1.100	1093.776	0.109	0.000	0.109
11	MEDAK (T)	RAMAYAMPET	PATHUR	GANGAPOOR	128	9	Pipeline	Pipeline	90	2241.596	0.700	1569.117	0.157	0.000	0.157
12	MEDAK (T)	RAMAYAMPET	PATHUR	JANSILINGAPUR	128	9	Pipeline	Pipeline	110	715.505	0.800	572.404	0.057	0.000	0.057
13	MEDAK (T)	RAMAYAMPET	PATHUR	JANSILINGAPUR	136	11	Pipeline	Pipeline	63	701.371	0.700	490.9597	0.049	0.000	0.049
14	MEDAK (T)	RAMAYAMPET	SHANKAMPET	T. MOHAMMADAPUR	134	12	Pipeline	Pipeline	63	746.243	0.700	522.3701	0.052	0.000	0.052
15	MEDAK (T)	MEDAK	TEKMAL	ARKELA	78	2	Pipeline	Pipeline	140	1755.321	0.800	1404.257	0.140	0.000	0.140
16	MEDAK (T)	MEDAK	MEDAK W	NAGSAMPALLY	65	4	Pipeline	Pipeline	225	2730.525	0.800	2184.42	0.218	0.000	0.218
17	MEDAK (T)	MEDAK	TEKMAL	TEKMAL	77	1	Pipeline	Pipeline	400	2241.212	1.100	2465.333	0.247	0.000	0.247
18	MEDAK (T)	MEDAK	TEKMAL	ANNARAV	70	3	Pipeline	Pipeline	90	1377.446	0.700	964.2122	0.096	0.000	0.096
19	MEDAK (T)	MEDAK	MEDAK W	NAGSAMPALLY	65	4	Pipeline	Pipeline	110	2101.507	0.700	1471.055	0.147	0.000	0.147
20	MEDAK (T)	MEDAK	TEKMAL	ANNARAV	67	3	Pipeline	Pipeline	125	2065.165	0.700	1445.616	0.145	0.000	0.145
21	MEDAK (T)	MEDAK	MEDAK E	S.KONDAPUR	25	13	Pipeline	Pipeline	350	3337.231	1.100	3670.943	0.367	0.000	0.367
Total Area in "Ha"													3.582	0.000	3.582

[Signature]
Superintending Engineer
TDWSP Circle, Mahabubnagar

"Counter Signed"

Chief Engineer
TDWSP, Hyderabad

[Signature]
Executive Engineer
S.P. Division Medak

[Signature]
Chief Engineer
TDWSP (RWS&S), Hyderabad.

DETAILS OF SURVEY INSTRUMENTS USED

S.No	Name of the Agency	Instruments used	Persons involved	Period of Survey
1	M/s KLSR Infra Tech Limited.	1.DGPS make:Trimble (R4) & Topcon(HYPER SE)	Mr.Srinivas,Surveyor	From 12th December, 2015 to 12th January, 2016


Executive Engineer
 Survey & Mapping Division Medak


 Superintending Engineer
 TDWSP Circle, Medak


"Counter Signed"




Chief Engineer
 TDWSP,Hyderabad

AREA STATEMENT - SEGMENT - 8 /2 - Medak District (RF) Medak Division						
Set	Structure type	Pipe Dia	Length in m	width m	Area_Ha	Total area in Ha
1	PIPELINE	400	2241.212	1.100	0.247	0.247
2	PIPELINE	140	1755.321	0.800	0.140	0.140
3	PIPELINE	90	1377.446	0.700	0.096	0.241
	PIPELINE	125	2065.165	0.700	0.145	
12	PIPELINE	63	746.243	0.700	0.052	0.052
13	PIPELINE	350	3337.221	1.100	0.367	0.367
TOTAL AREA IN HA			11522.608		1.047	1.047
AREA STATEMENT - SEGMENT - 8 /2 - Medak (ECOSENSITIVE ZONE)						
4	PIPELINE	225	2730.525	0.800	0.218	0.365
	PIPELINE	110	2101.507	0.700	0.147	
7	PIPELINE	180	1832.150	1.000	0.183	0.183
8	PIPELINE	400	994.342	1.100	0.109	0.417
	PIPELINE	400	519.321	1.100	0.057	
	PIPELINE	400	2283.725	1.100	0.251	
9	PIPELINE	90	2241.596	0.700	0.157	0.214
	PIPELINE	110	715.505	0.800	0.057	
10	PIPELINE	400	1378.479	1.100	0.152	0.464
	PIPELINE	225	3118.085	1.000	0.312	
11	PIPELINE	63	701.371	0.700	0.049	0.049
TOTAL AREA IN HA			18616.606		1.692	1.692
TOTAL AREA IN HA			30139.214		2.739	2.739
AREA STATEMENT - SEGMENT - 8 /2 - Medak District (Pocharam WLS)- Medak WLM Division						
6	PIPELINE	63	703.033	0.700	0.049	0.049
5	PIPELINE	200	7115.116	1.000	0.712	0.794
	PIPELINE	90	715.570	0.800	0.057	
	PIPELINE	160	308.619	0.800	0.025	
	PIPELINE	160	308.619	0.800	0.025	
TOTAL AREA IN HA			8842.338		0.843	0.843

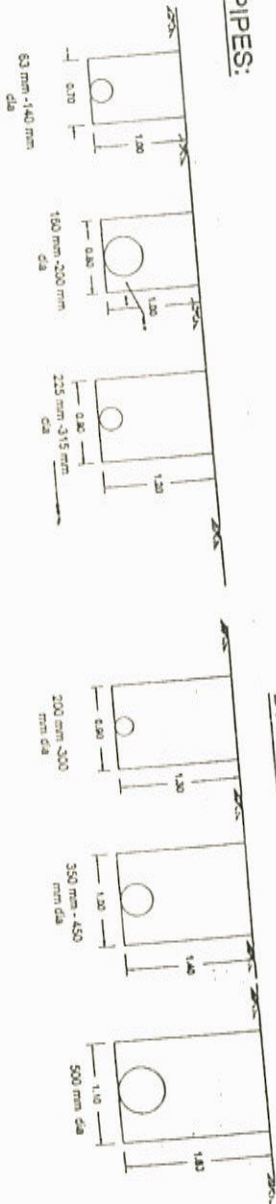

Executive Engineer
T.D.W.S.P. Division Medak


Superintending Engineer
T.D.W.S.P. Division Medak

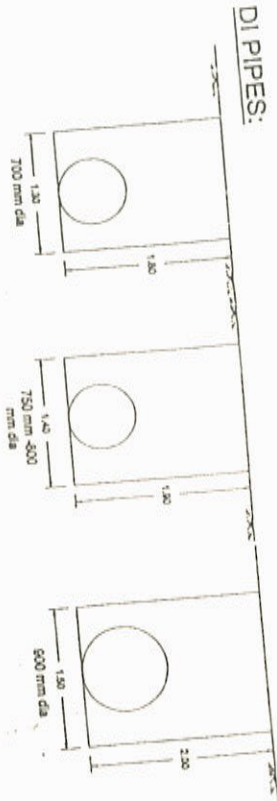

Chief Engineer
T.D.W.S.P. (RWS&S), Hyderabad.

TELANGANA DRINKING WATER SUPPLY PROJECT SEGMENT-8/2 MEDAK DIST. SECTION SHOWING THE PIPELINE CROSS SECTIONS

HDPE PIPES:



DI PIPES:



DI PIPES:

[Signature]
Executive Engineer
Medak Division Medak

[Signature]

Superintending
TDWSP Commandant Medak

[Signature]
Chief Engineer
TDWSP (PWS&S), Hyderabad.

GOVERNMENT OF TELANGANA
ROADS & BUILDINGS DEPARTMENT

From:
Sri M. Balanarsaiah, M.E.,
Executive Engineer (R&B)
Division : Siddipet.

To
The Executive Engineer,
RWS & S Department,
TDWSP Division Medak.

Lr.No.DB/T4/2015-16/ 157

Dated: 04-02-2016.

Sir,

- Sub:- TDWSP - Providing Drinking Water Supply Project – Medak Segment Laying of DI pipe line along the R&B roads – Permission accorded – Intimation - Regarding.
- Ref:- 1) The E.E.TDWSP, Division Medak Letter No. AEE/TDWSP/Medak Segment/R&B permission/2015/Estimate, Dated: 18-12-2015.
2) The DEE (R&B) Sub-Division Medak letter No. DEE/MDK./2015-16, Dated: 18-12-2015.
3) G.O.Ms.No.12, Dated: 16-09-2015 (Road cutting restoration new charges)

- III -

Advertising to the references cited above, the permission is here with accorded for the work **“Providing Drinking Water from Singur Source to Medak, Narayanakhed and Part of Andole Constituencies”** for laying of Pipe line along the Medak Budmatpally road from km.0/0 to 35/5 provided the executing agency has to restore the road cutting along the road and across the road including along the berms. The necessary restoration charges estimate prepared for **Rs.103.50 lakhs** (as per revised road cutting restoration charges vide reference 3rd cited above) is here with enclosed for your information.

- 1) Water pipe line should be laid in suitable depth.
- 2) Necessary caution Board for cautionary measures shall be taken at the time of road cutting works in progress.
- 3) The excavated trench shall be conducted in the presence of the (R&B) Departmental Engineers.
- 4) If any damage accord to the other utility services the penalty for such damage shall be born by (TDWSP) RWS&S department.
- 5) The excavated trench shall be restored after laying the pipe line suitably and the excavation shall be only to half the width of one way (i.e. 1/4 of the road) at a time.
- 6) Any damages occurred to the pipe line laid during road widening work or improvement works taken up by R&B Department shall be borne by (TDWSP) RWS&S Department.

Yours faithfully,

Executive Engineer (R&B)
Division : Siddipet.

Copy submitted to the Superintending Engineer (R&B), Medak Circle Hqrs at Sangareddy for favour of kind information.

Copy Submitted to the Superintending Engineer, TDWSP, Medak Circle at Sangareddy for kind information.

Copy to the Dy. Executive Engineer /R&B, Sub-Division Medak for information.

Executive Engineer
T.D.W.S.P. Division Medak

GOVERNMENT OF TELANGANA
Forest Department

From
Sri Ch.Sivaiah,M.Sc.,
Divisional Forest Officer,
Wildlife Management,Medak.

To
The Executive Engineer,
T.D.W.S.P. Division,
Medak.

Rc.No.1081/TDWSP/2015, dt.25.08.2015.

Sir,

Sub:- TDWSP - Medak Segment - Providing Drinking Water Supply Project for Medak Segment in Medak District - Seeking non-notified habitations in Wildlife Management Division, Medak - Information furnished - Reg.

Ref:-1)AEE/TDWSP/2015-16, dt. .07.2015 of EE, TDWSP,Medak.
2)F.R.O., Pocharam Rc.No.105/2015/WLS(P), dt.24.08.2015.

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With reference to the subject cited above, it is informed that the joint inspection has conducted with Forest Range Officer, Pocharam and Assistant Engineer, R.W.S., Medak mandal for identification of pipeline passing through the Pocharam Wildlife Sanctuary area and also to identify the villages inside the sanctuary area.

As per the DGPS Survey conducted across the RF line and also as per the Joint inspection conducted for supply of drinking water to Medak Constituency, it is stated that actually no villages are notified in the sanctuary area. After notification only the village 3 number thanda has developed inside the sanctuary. Hence we could say it is un-notified village in the Pocharam Wildlife Sanctuary coming in Ramayampet Mandal of Medak Constituency.

Sl. No.	Name of the Mandal	Name of the Tanda/ Habitation	Main village	Compt. No.	Name of the Range
1	2	3	4	5	6
1	Ramayampet	3 No Thanda	Dantepally	101	Pocharam WLS

This is submitted for favour of information.

ATTESTED


Executive Engineer
T.D.W.S.P. Division Medak

Yours faithfully,


Divisional Forest Officer,
Wildlife Management, Medak.