Enclosure 2 CHECK LIST For the proposal for Diversion of Forest Lands for non-Forestry purpose under the Forest Conservation Act, 1980 for Linear Projects: Railway/UG Gas Pipeline/Water Pipeline/Optical Fibre/Electricity Lines etc. State S. No. of Project: Date of receipt in NO-PCCF's office: Construction of Clear Water ELBRs and Laying of Pipe Line Name of the Project: for 5 Constituencies in Nalgonda District under Segment -3.952 Area proposed for diversion, in Ha: Nalgonda Name of the Forest Division: Whether area proposed falling in WLS / NP / ESZ / Biosphere No Reserve or WL Corridor? Whether situated in Scheduled Area No Name of Document/Information Provided or Not Page No. Remarks (Yes/No) A PART-I Main application Form from Part-I to V with all its columns duly filled up and 7-15 Yes signed by the competent authority with date, place and their official seal. 1-6 2 Detailed note on the project. Yes Full Justification for locating the project in forest area 33 3 Yes (un-avoidance of the forest area for the purpose) Certificate for minimum use of forest land giving details of the alternatives Yes 18 examined and reasons for their rejection. Map of the project site forest area demanded on original Survey of India topo-5 sheet in 1:50000 or any other suit- able scale; clearly showing forest boundaries and Yes 51 adjoining areas with their land use in distinct colors. Index Map, if the area is very small, showing forest boundaries and a location Yes 42-50 map on a larger scale with land use of the area required. Geo-referenced digital data (e00 format, Geographic co-ordinate system WGS 84 datum, readings up to 8 decimal places in degrees) of the boundary/ies of the proposed FL for diversion in Shape file (Soft copy in a DVD along with RAW & post-Submitted processed data) and digital map in hard copy duly authenticated by competent Yes *The survey shall be performed using DGPS in real-time or post-processed mode. However the survey may be performed using TS in GPS shadow areas, and data shall be duly georeferenced using GCPs collected by dual frequency DGPS receivers. Make & Model of the DGPS equipment used, Names of the Agency/persons 39 involved in the DGPS survey, period of survey, name of the authenticating agency Yes for the accuracy of the survey. 9 Linear map or a diagrammatic map of the project site. 40

Yes

Yes

Yes

No

30

27

28

Statement showing the details of forest area involved i.e. Division, Range, Beat,

Cost Benefit (CB) analysis in prescribed format, wher- ever required. (For projects

Status of clearance under Environment (Protection) Act, 1986 & Rules 2006;

Item wise breakup of the forest area proposed for di-version, if any.

Forest Block & Compartment No. wise.

involving area of >20 Ha in plains & >5 Ha in hills)

10

11

12

13

wherever required.

14	Detailed scheme for rehabilitation of project affected persons, wherever required.	No	-	
15	Minimum distance of the proposed site from Wildlife Sanctuary and/or National Park, if any.	No	2	
16	To show the existing Water body / Water channel or road, which should be identifiable.	No	-	
17	To show the newly proposed bridge /culvert / under- ground pass / tunnel etc. to be identify clearly.	No	-	<i>i.</i>
18	To enclose the cross section Plan / Map indicating dimension of (Length / Width / Height /depth etc) clearly.	Yes	41	
19	Undertaking to pay the Net Present Value (NPV), Addl. NPV of the forest land involved.	Yes	19	
20	Undertaking to pay the Extraction Charges of the trees to be removed from the forest land involved.	Yes	20	
21	Details of equivalent non-forest land identified for Compensatory Afforestation viz. Survey No., Village, Tahsil /Mandal, District etc. along with map in SOI Toposheet in 1:50000 or appropriate scale along with the boundaries of adjoining forest area.	NA	-	
22	Geo-referenced digital data of CA land (e00 format, Geographic co-ordinate system WGS 84 datum, read- ings up to 8 decimal places in degrees) of the boundary/ ies of the proposed FL for diversion in Shape file (Soft copy in a DVD along with RAW & post-processed data) and digital map in hard copy duly authenticated by competent authority. * The survey shall be performed using DGPS in real-time or post-processed mode. However the survey may be performed using TS in GPS shadow areas, and data shall be duly geo-referenced using GCPs collected by dual frequency DGPS receivers.	NA	-	
23	Make & Model of the DGPS equipment used, Name/s of the Agency/persons involved in the DGPS survey, period of survey, name of the authenticating agency for the accuracy of the survey.	Yes	-	
24	Certificates a, c, d, g & h under RoFR Act; where Primi- tive Tribal Groups (PTG) & Pre-Agricultural Commu- nities (PAC) are involved in the proposed FL.	Will be submited to DFO	-	

"Counter Signed"

Superintending Engineer, TDWSP Circle - Hyderabad.

Chie Engineer, TDWSP,Hyderabad.

Brief Notes on Segment 3/1

TELANGANA DRINKING WATER SUPPLY PROJECT IN NALGONDA DISTRICT

EST COST Rs:2106.00 Crores

PROFILE

As a part of TelanganaDrinking Water Project(TDWSP), it is proposed to cover all habitations in the district by surface water to ensure 100 LPCD at household level. The methodology adopted is to draw surface water from sustainable sources and supplying the water after treatment to the habitations through two parts of the segments.

In the design, it is proposed to utilize the existing infrastructure available in the village depending on the suitability, to the extent possible and augmentations are proposed wherever required based on necessity. The salient features of the Segments is as follows:

As a part of Telangana Drinking Water Project, Initially the AKBR segment (The area which is proposed to be covered with Akkampally Balancing Reservoir as source) is planned for covering 5 constituencies of Nalgonda district. Those are Devarakonda, Munugode, NagarjunaSagar, Bhuvanagiri and Aleru. These 5 constituencies comprises of 27mandals. But the SEGMENT is planned by excluding the Munugode mandal of Munugode constituency. Hence the number of mandals in present plan are 26. These 26mandals comprises of 1672 Rural habitations. Population of these habitations is 13,55,040. Out of which 1466 rural habitations of population 1200026 covered in this segment. It is proposed to provide water supply to two urban local bodiesBhuvanagiri and Devarakonda. Sum of urban population planned is 92,753. Population of YadagiriGutta is considered as 50000 due to floating and rapid growth prospects.

The Hon'ble CM held extensive review of Telangana Drinking Water Supply Project (TDWSP) on 06-08-2015. The Hon'ble CM instructed to to cover Bhongir and Alair constituencies from Yellampally HMWSSB line instead of AKBR as envisaged. Also instructed to prepare the DPR with due investigation to locate the tapping point on HMWSSB line. Accordingly the Chief Engineer V&QC inspected the line and finalized to tap water from the existing GLBR of HMWSS on GhanpurGutta in Shamirpet(M) of RangaReddy Dist. Accordingly the DPR is prepared in 2 Parts ie Part A and Part B.

Part A: The Segment With Akkampally Balancing Reservoir (AKBR) as Source.

Part B :The Segment With Yellampally HMWSSB line (Godawari) Tapping Point at Ghanpurgutta as Source.

THE SEGMENT WITH AKKAMPALLY BALANCING RESERVOIR AS SOURCE:

Main source selected for this Segment is Akkampally Balancing Reservoir (AKBR) in Pedda Adisarlapally mandal of Nalgonda district. This reservoir gets water from Nagarjunasagar with a mega lift at Puttangandi. Irrigation department has constructed this lift as part of SLBC project. This reservoir will get water from Srisailam by gravity once if the SLBC tunnel is completed. The Hyderabad Metro Water works board (HMWSSB) is also presently drawing water from the same source at Kodandapuram. The HMWSSB, after drawing raw water from Off take point on SLBC canal, treats in Kodandapuram WTP headworks. Then clear water is pumped to Hyderabad in two stages lifting.

The government has allocated 10 acres land for RWS department in the premises of HMWSSB's Kodandapuramheadworks compound. The Raw Water will be drawn from the same off take point(Inlet Invert level +229.93) that of HMWSSB by a branched pipe and will be collected in to Raw water sump at KodandapuramHeadworks (+222m Level). From thus collected raw water 39000

.

LPM is proposed to be treated atKodandapuram and will be supplied to Devarakonda and NagarjunaSagar constituencies. The capacity of RSF proposed at Kodandapuram is 50 MLD. This capacity includes the 10% quota allocated for industrial demand. It covers 344 rural habitations and Devarakonda municipality. Clear water will be pumped to 3 MBR (Main Balancing Reservoirs) at Bonthagattu, Chilakamarri peak, Waddipatla peak and in turn distributes to local OHBRs and there byto OHSRs in the Habitations by gravity. The quota allocated for industries is proposed to be pumped up to Chilakamarri peak.

Next the raw water is proposed to be pumped to areator at Batlapally village of Marrigudem mandal (adjacent to SwamulawariLingotam village of Nampally mandal) at a distance of 46 km at +343m (+338+3) level.At Batlapally raw water will be treated and supplied to Munugode constituency, higher contours of Devarakonda constituency, part of Nagarjunasagar constituency, part of Bhongir constituency.

The Population and habitation details are as follows.

Contituency	No of habs	Population	
Munugode	274	268438	
Devarakonda	244	148588	
Nagarjunasagar	7	5039	
Bhongir	30	29350	
Total	451415	555	

The Capacity of RSF plant proposed at Batlapally is 70MLD. This capacity includes 10% quota allocated for industrial demand. This RSF covers 555 rural habitations of population 451415. From the Batlapally clear water sump water will be pumped to GLBR on Gollakonda hillock(+500m) and to a Heap at Eedulagandi (+410) in Marrigudemmandal. Industrial quota will be supplied up to Chinthapally village which is adjacent to Vinjamoor village where the demand is intended.

451415

There are some existing WTPs in this segmnet which are already commissioned and functioning. Those are Penldipakala, PeddaDevulapally, Peddavura town, Haliya town, Mupparam. Actually these plants are designed and are being operated to supply water at 40 LPCD rate. By restricting the number of

habitations under these plants, it has been planned to supply 100 LPCD water to those limited number of habitations. As such 170 habitations are proposed to get water from the existing WTPs. Pendlipakala RSF will cover 90 habitations and PeddaDevulapally plant will cover 66 habitations in Thripurarammandal. There are 28 inaccessible habitations in this segment for which augmentation of single village schemes will be proposed including RO plants where ever there is quality problem.

The capacity's of existing WTPs are as follows:

1. RSF of 7.0 MLD capacity

@ Pendlipakala

2. RSF of 9.0 MLD capacity

@ PD pally (Thripuraram)

3. RSF of 3.0 MLD capacity

@ Peddavoora

4. RSF of 5.0 MLD capacity

@ Halia

5. RSF of 5.9 MLD capacity

@ Mupparam

Salient features of this AKBR segment:

Constituencies covered: 3

Mandals : 15

Total Habitations : 898

Population Rural 2011 : 688096

SC : 118302

ST : 108818

PLAIN : 460976

Urban Habitation :1 (Devarakonda)

Population :39414

WTP : 50 MLD plant at Kodandapuram, 70 MLD at Batlapally,

THE SEGMENT WITH YELLAMPALLY HMWSSB LINE FROM GODAWARI AS SOURCE:

Main source selected for thisSegment is 2.50 MLD GLBR on GhanpurGutta (+620.00) in Shamirpetmandal of Ranga Reddy district. This reservoir gets water from the Pumping main laid by Hyderabad Metro Water works board (HMWSSB)

from 750 MLD treatment plant at Mallapur near Siddipet in MedakDist. This project will draw raw water from Yellampally project (Godawari river) in Adilabad Dist. HMWSS laid this line as part of Godawari Drinking water supply project to the Hyderabad. The Clear water will be drawn from the Ghanpur GLBR (+620.00) will flow by gravity for both Bhuvanagiriand Alair constituencies comprises of 568 rural habitations and BhuvanagiriMuncipality. 10 % of the industrial demandalso included. The industrial demand will be supplied to all primary and secondary lines in both constituencies.

Salient features of this segment:

Constituencies covered : 2

Mandals : 10

Total Habitations : 568

Population Rural 2011 : 511930

SC :80155

ST : 36858

PLAIN :394917

Urban Habitation :1 (Bhongir)

Population :39414

Salient features of Total (AKBR+HMWSS as source) segment:

Constituencies covered: 5

Mandals : 26

Total scope Habitations : 1672

Population Rural : 13,48175

SC :2,19,441

ST :1,93064

PLAIN :935670

Urban Habitation : 2 (Bhuvanagiri, Devarakonda)

Population :92,753

Urban ultimate Clear water Demand: 29.96 MLD

Habitations planned to get water from GRID:

Rural Habitions: 1466

Population : 12,00,026

Urban habitions: 2 (Bhuvanagiri, Devarakonda)

Urban Population

92753

WTP

: 50 MLD plant at Kodandapuram, 70 MLD at Batlapally,

Raw Water demand: 2.791 TMC per Annum at ultimate year.

An amount of Rs.2106.00Crores has been administratively sanctioned vide GO .Rt. No 336Dt 01-06-2015 of PR & RD (RWSIV) Dept. The estimate is compiled in 2 Parts for convenience according to the nature of works. Those are :

Part A: The Segment With Akkampally Balancing Reservoir (AKBR) as Source for Deavarakonda, Nagarjunasagar, Mungode Constituencies with Estimated Cost Rs1306.00 Crores.

Part B: The Segment With Yellampally HMWSSB line (Godawari) Tapping
Point at Ghanpurgutta as Source for Alair and Bhongir
Constituencies with Est cost: Rs.800.00Crores

Superintending Engineer TDWSP Circle Hyderabad

Chief Engineer, TDWSP Hyderabad.

	COST BENEF	IT ANALYSIS
SI No	Parameters for evaluation of loss of Forests	Construction of Clear Water ELBRs and Laying of Pipe Line for 5 Constituencies in Nalgonda District Segment -3/1
1	Lossof value of timber fuel wood and minor forest produce on an annual basis, including loss of man hours per annum of people who derived livelihood and wages from the harvest of these Commodities.	No such loss of value of timber, fuel wood and minor forest produce on an annual basis, including loss of man hours per annum of people who derived livelihood and wages from the harvest of these Commodities is existing in this project.
2	Loss of animal husbandry productivity,including loss of fodder.	Not applicable for this project.
3	Cost of human resettlement	No such human settlement is existing in the said forest land
4	Loss of Public facilities and administrative infrastructure (Roads,buildings,schools,dispensaries,elec tric lines,railways etc.,) on forest land, of which would require forest land if these facilities were diverted due to the project.	Not applicable for this project since the proposed forest land is free all administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railway etc.,)
5	Environmental losses:(Soil erosion,effect on hydrologicl cycle,wildlife habitat,micro climate upsetting of ecological balance.	Since no forest land is required to be acquired, hence no such environmental losses due to soil erosion effect on hydrological cycle wildlife habitat micro climate upsetting of ecological balance is anticipated due to the project.
6	Suffering to ousters	No Such suffering to ousters

Superintending Engineer, TDWSP Circle - Hyderabad.

"Counter signed"

Chief Engineer TDWSP,Hyderabad

Statement showing the proposal for permission for laying the drinking water supply pipe line in reserve forest area in Nalgonda District.

Set No	Stretches	Length in mts	Dia of pipe in mm	Width	Depth	Area in Hectares
1	Ghanpur hillock to Turkapalli Clear Water Trunck Main near Shamirpet	375.484	1300	6.00	4.00	0.225
2	Veerareddi pally to Gandamalla Clear Water Trunck Main near	1133.153	125	1.50	1.00	0.170
2	Veerareddi pally to Thirumalapuram Clear Water Trunck Main near	486.178	300	3.00	1.20	0.146
3	Venkatapuram to Turkapalli Clear water Main	810.370	400 & 700	4.00	1.50	0.324
4	Choutuppal to Koyalgudem Clear water Main near Lakkarm	783.334	400	4.00	1.40	0.313
4	Thallasingaram Rd.Jn to Lingareddy gudem	527.967	350 , 300 , 180	5.00	1.40	0.264
4	Thallasingaram Rd.Jn to Thallasingaram OHBR	140.856	300	5.00	1.30	0.070
4	Thallasingaram OHBR Jn to Rd. Jn	143.185	350 , 180	4.00	1.40	0.057
5	Gangamulla Thanda to Pallegattu Thanda	1300.000	63	1.50	1.00	0.195
5	Pallegattu Hill foot Jn to ELBR	131.929	100 (2 nos)	6.00	1.20	0.079
5	ELBR at Pallegattu Hillock	-	-	-	-	0.044
5	Jangam Rd. Jn to Hillfoot Jn	180.401	250 (2 nos)	6.00	1.20	0.108
5	Jangam Hillfoot Jn to ELBR	115.740	250 (2 nos)	6.00	1.20	0.069
5	Jangam Hillfoot Jn to ELBR (Approach Road)	104.040	-	6.00	-	0.062
5	Jangam ELBR to OHBR	71.785	300	6.00	1.30	0.043
5	Jangam OHBR to Hillfooot Jn	117.854	300 (2 nos)	3.00	1.30	0.035
5	ELBR at Jangam Hillock	-	-	- 2	_	0.046
5	OHBR at Jangam Hillock	-	-		-	0.010
6	Battlapally to Laxmanapuram	1346.756	75	1.00	1.00	0.135
7	Iddampally to Erraguntllapally	1795.122	150	2.00	1.20	0.359
8	Cherukupally gate to Bogguladona Marrammagudi hillfoot jn to ELBR on	3464.269	140	3.00	1.20	1.039
9	hillock ELBR at Marrammagudi hillock to hill foot	167.349	150	1.50	1.20	0.025
9	jn	146.468	350	6.00	1.40	0.088
9	ELBR at Marrammagudem Hillock		-	-	-	0.046
						2.052

Total

13342.240

3.952

Area required

3.952 Ha

Superintending Engineer, TDWSP Circle, Hyderabad. "Counter Signed"

Chief Engineer, TDWSP Hyderabad

								Dinolino	Ctrictir	Total
	Range	Section	Beat	Compt . No	Details	Length in 'm'	Width in 'm'	Area in "ha"	structur es Area in "ha"	Area in 'Ha'
공	CHOUTUPPAL	BHONGIR	VEERAREDDYPALLI	248	Pipeline	1133.153	1.500	0.170	0.000	0.170
Ċ	CHOUTUPPAL	BHONGIR	VEERAREDDYPALLI	247	Pipeline	486.178	3.000	0.146	0.000	0.146
0	CHOUTUPPAL	BHONGIR	DATTAIPALLY	235	Pipeline	810.370	4.000	0.324	0.000	0.324
	HYDERABAD_NORTH	SHAMIRPET	TURKAPALLY	225	Pipeline	375.484	000.9	0.225	0.000	0.225
_	CHOUTUPPAL	CHOUTUPPAL	CHOUTUPPAL	222	Pipeline	527.967	5.000	0.264	0.000	0.264
	CHOUTUPPAL	CHOUTUPPAL	CHOUTUPPAL	222	Pipeline	143.185	4.000	0.057	0.000	0.057
	CHOUTUPPAL	CHOUTUPPAL	CHOUTUPPAL	222	Pipeline	140.856	5.000	0.070	0.000	0.070
	CHOUTUPPAL	CHOUTUPPAL	CHOUTUPPAL	221	Pipeline	783.334	4.000	0.313	0.000	0.313
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Pipeline	180.401	000'9	0.108	0.000	0.108
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Pipeline	117.854	3.000	0.035	0.000	0.035
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Pipeline	104.040	000.9	0.062	0.000	0.062
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Pipeline	115.740	000.9	0.069	0.000	0.069
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Pipeline	71.785	000.9	0.043	0.000	0.043
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	199	Pipeline	1300.000	1.500	0.195	0.000	0.195
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	199	Pipeline	131.929	6.000	0.079	0.000	0.079
	DEVARAKONDA	MARRIGUDA	MARRIGUDA	187	Pipeline	1346.756	1.000	0.135	0.000	0.135
	MIRYALGUDA	MIRYALGUDA	RAGADAPA	55	Pipeline	167.349	1.500	0.025	0.000	0.025
	MIRYALGUDA	MIRYALGUDA	RAGADAPA	55	Pipeline	146.468	000.9	0.088	0.000	0.088
1	DEVARAKONDA	DEVARAKONDA	MUDIGONDA	175	Pipeline	1244.900	2.000	0.249	0.000	0.249
	DEVARAKONDA	DEVARAKONDA	MUDIGONDA	175	Pipeline	550.222	2.000	0.110	0.000	0.110
	DEVARAKONDA	DEVARAKONDA	GUNDLAPALLY	165	Pipeline	3464.269	3.000	1.039	0.000	1.039
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	199	Structure				0.044	0.044
_	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Structure				0.046	0.046
	CHOUTUPPAL	NARAYANPUR	NARAYANPUR	198	Structure				0.010	0.010
	MIRYALGUDA	MIRYALGUDA	RAGADAPA	55	Structure				0.046	0.046
							Total Area in			
							"H2"	3 806	0 146	3.952

"Counter Signed"

Superintending Engineer TDWSP Circle - Hyderabad

Chief Engineer, TDWSP, Hyderabad

Beat Wise Details - Seg 3/1 Nalgonda

S.No	DISTRICT	SEGMENT NAME	COMP_NO	DIVISION	RANGE	BEAT	SECTION
1	Nalgonda	Seg - 3/1 NLG	248	248 Nalgonda	CHOUTUPPAL	VEERAREDDYPALLI	BHONGIR
2	Nalgonda	Seg - 3/1 NLG	247	247 Hyderabad	CHOUTUPPAL	VEERAREDDYPALLI	BHONGIR
3	Nalgonda	Seg - 3/1 NLG	235	235 Nalgonda	CHOUTUPPAL	DATTAIPALLY	BHONGIR
4	Rangareddy	Seg - 3/1 NLG	225	225 Nalgohda	HYDERABAD_NORTH	TURKAPALLY	SHAMIRPET
5	Nalgonda	Seg - 3/1 NLG	222	222 Nalgonda	CHOUTUPPAL	CHOUTUPPAL	CHOUTUPPAL
9	Nalgonda	Seg - 3/1 NLG	221	221 Nalgonda	CHOUTUPPAL	CHOUTUPPAL	CHOUTUPPAL
7	Nalgonda	Seg - 3/1 NLG	198	198 Nalgonda	CHOUTUPPAL	NARAYANPUR	NARAYANPUR
∞	Nalgonda	Seg - 3/1 NLG	199	199 Nalgonda	CHOUTUPPAL	NARAYANPUR	NARAYANPUR
6	Nalgonda	Seg - 3/1 NLG	187	187 Nalgonda	DEVARAKONDA	MARRIGUDA	MARRIGUDA
10	Nalgonda	Seg - 3/1 NLG	52	55 Nalgonda	MIRYALGUDA	RAGADAPA	MIRYALGUDA
11	Nalgonda	Seg - 3/1 NLG	175	175 Nalgonda	DEVARAKONDA	MUDIGONDA	DEVARAKONDA
12	Nalgonda	Seg - 3/1 NLG	165	165 Nalgonda	DEVARAKONDA	GUNDLAPALLY	DEVARAKONDA

"Counter Signed"

Superintending Engineer TDWSP Circle - Hyderabad

A D

Chier Engineer, TDWSP, Hyderabad

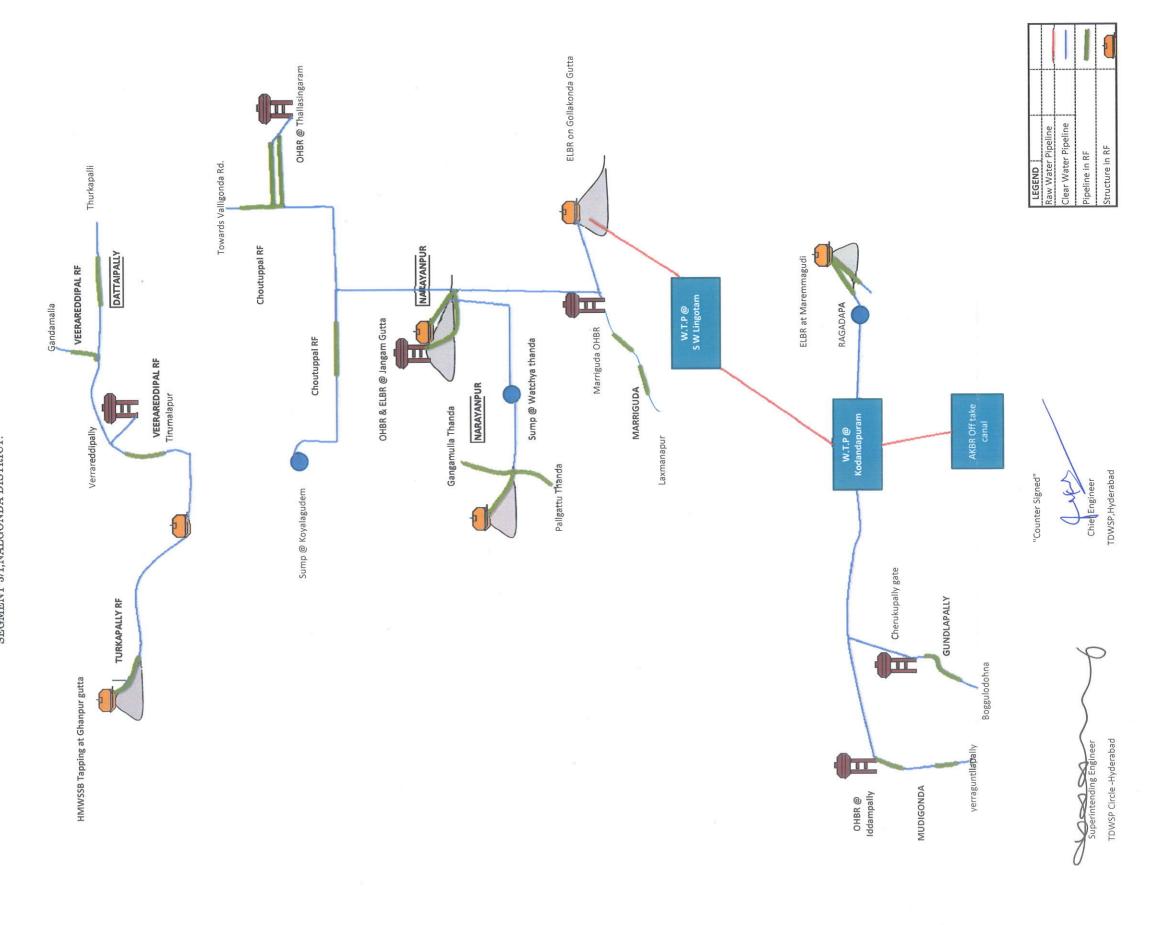
		DETAILS OF SURVEY INSTRUMENTS USED	ENTS USED	
S.No	Name of the Agency	Instruments used	Persons involved	Period of Survey
Н	S&H Resources Informatics (P) Ltd. #Plot no: 5&6, 3rd floor,Lucid diagnostics building, Nizampet x roads, Hyderabad-500072	1. DGPS make : COMNAV T300	Sri.Swapna AEE , TDSWP - Bhongir Sri. B Saibaba AE , TDSWP - Choutuppal Sri.E Naresh AE , TDSWP - Mallepally Sri.Niranjan Sinha AE , TDSWP - Mallepally	From November 2015 to December 2015

"Counter Signed"

Superintending Engineer TDWSP Circle - Hyderabad

Chief Engineer TDWSP,Hyderabad

FLOW DIAGRAM
TELANGANA DRINKING WATER SUPPLY PROJECT
SEGMENT-3/1,NALGONDA DISTRICT.



TELANGANA DRINKING WATER SUPPLY PROJECT SEGMENT-3/1 AKBR MAP SHOWING PIPELINE CROSS-SECTION IN FOREST AREA OF AKBR Nalgonda

