1. INTRODUCTION OF THE PROJECT: Project area comprises the Rural areas of Haliyal Taluka of Uttar Kannada district in northern coastal part of Karnataka state. Haliyal Taluka is located in North east part of Uttar Kannada district and in a distance of about 120.00 km from district head quarter. Water supply to villages of Haliyal taluka depended on ground water i.e. tube wells and open wells as source. Though Haliyal Taluka receives average rainfall fall of about 1166.30 mm and some part of this scheme is in thick forest and receives rainfall about 2000 to 2200 mm but due to highly undulating topography and highly permeable shallow aquifers allow ground water recharged during monsoon as base flow, due to which maximum habitations are facing acute shortage of water due to depletion of ground water resources during peak summer. Ground water sources are either depleting during summer season or also contaminated due to chemical contamination which envisage permanent water supply to this area and accordingly Rural Drinking Water and Sanitation department initiated a comprehensive project to fulfill water demand of Haliyal taluka rural area of Uttar kannada District. M/S B. R Patil Engineers and contractors become the lowest bidder for this work and enter in to agreement for execution of this scheme and as per tender conditions concept report and hydraulic designs of this scheme prepared and being submitted.

2. PROJECT AREA, POPULATION & WATER DEMAND

2.1 DISTRICT PROFILE

Uttara Kannada is a district in the Indian state of Karnataka. It is bordered by the state of Goa and Belagavi District to the north, Dharwad District and Haveri District to the east, Shivamogga District and Udupi District to the south, and the Arabian Sea to the west. The city of Karwar is the administrative headquarters of the district. Sirsi, Dandeli and Bhatkal are other major towns in the district. The district has 2 agroclimatic divisions, namely: The district has 12 taluks, namely, Karwar, Angola, Kumta, Bhatkal, Honnavar, Siddapur, Sirsi, Yalapura, Mundagoda, Supa (Joida), Haliya and Dandeli.





Dandeli Wild life Sanctuary The Dandeli Wildlife Sanctuary, which is surrounded by the River Kali, is a rare picnic spot for wildlife. Spending time with rare birds, tigers, elephants, deer, bison, a crocodile camp and various animals provides a refreshing festival. The sanctuary is the second largest wildlife sanctuary in Karnataka





2.2 DEMOGRAPHICS.

According to the 2011 census Uttara Kannada has a total population of 1437169 and has rural population and urban population of 1018188 and 418981 respectively. The district has a population density of 140 inhabitants per square kilometre (360/sq mi). Its population growth rate over the decade 2001-2011 was 6.15%. Uttara Kannada has a sex ratio of 979 females for every 1000 males.

2.3 POPULATION PROJECTION AND WATER DEMAND :

List of habitations covered under this project in Haliyal taluka provided in technical bid of tender document. List of villages, population and water demand is considered as per the details given in bid. As per document census 2011 population of 113 habitation is 102580 and projected population for year 2047 is 152008 population growth rate 13.96 % considered for projecting future population. As per NORMS 85 LPCD of rate of water supply considered and accordingly following is the population projection and water demand.

Total habitati		Projected Population				Water Demand in Itr/Day	Water Demand in Itr/Day	Raw Water Demand for year	Raw Water Demand for year
ons	2011	2017	2037	2047		2037	2047	2037	2047
113	93954	102580	133332	152008	85	11333220	12920680	14166525	16150850

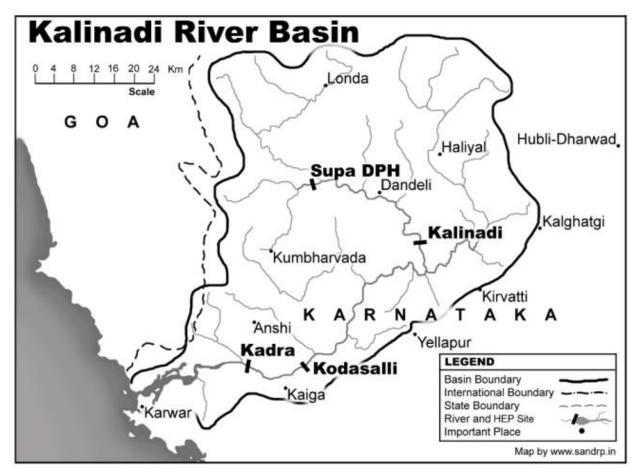
3. PROPOSED WATER SUPPLY SCHEME:

This scheme is prepared to supply treated water to 113 habitations of Haliyal taluka in Uttar Kannada District. Source for this scheme is Kali River; this source is sustainable as assured water for all twelve months is available as discussed in source sustainability. For preparation of base map and designs of all components of this scheme detailed survey of this scheme carried out along with Total station instruments after identifying locations of villages from maps available at Department of RDW&S department pertaining to this scheme, toposheets and Taluka maps. Locations of head work, break pressure tank, Water treatment plant, MBTs, IPS and alignment of pipelines placed on one platform using ZWCAD software and accordingly base map of this scheme prepared. The location of all components and villages identified on map have been physically verified on ground by deploying our Engineering and Surveying team, they had exhaustively collected all data like locations and levels with respect to MSL. The details survey of the all components of scheme like village reservoir, actual location of head work, WTP, MBTs and other components carried out using total station to prepare basemap of this scheme. While preparing the basemap and key map majour road crossings, National highway crossings, canal crossing,



railway crossing and coming across the pipeline alignment identified. After finalising the locations and levels of all components of scheme zoning of villages carried out satisfying the criteria mentioned in tender document for grouping of habitations. Highest elevations are identified after detailed survey from where pure water can be conveyed to all habitations by gravity and wherever water not reaching by gravity intermediate sumps proposed.

In this scheme it is proposed to lift raw water from Kali River near Dandeli town and raw water proposed to convey up to WTP by pumping. Water treatment plant of 16.20 MLD of RSF type proposed near Yadoga village and from there pure water proposed to convey upto ZBT-1, ZBT-2, ZBT-3, ZBT-4 and ZBT-5 through rising main by pumping from there pure water conveyed to all habitations by gravity except 06 habitations which are on higher elevation for which intermediate sumps are proposed from where pure water proposed to deliver by pumping. As per instruction and technical bid entire project are divided in 06 zone and separate gravity main network designed for each zone. Following are details of scheme.







3.1 SOURCE

SUSTAINABILITY: The Kali River has its origin near the village of Kushavali of Taluka, 15°14'56" Joida N 074°17'58" Ε, in the Western Ghats and flows eastwards into the Supa Dam Reservoir where it is joined by the Pandri River from the left

(north). The Kali exits at Supa Dam near. Kurandi village then flows east towards Dandeli. Passing south of Dandeli, the Kali River flows southeast into the Bommanalli Reservoir, Supa Dam is located in Joida Taluk. it was built across the River Kali by Karnataka Power Corporation Limited. This dam has a power house at the foot of this dam with two electric generators. They are of 50 megawatts each. The dams has live storage capacity of 145 tmc and a catchment area of 1,057 Sq.Kms. Water being release continuously for power generation as seen from the flow data collected from KPC department for last 25 years. Every year this dam filled to its full capacity and water released for power generation in river throughout year. Hence this source is most sustainable for the meager requirement of this scheme which is 0.208 TMC in a year

As per record available from KPC department minimum release of water in kali river from supa dam is 0.52 MCUM (18.34 Mcft) in 2014 August and monthly requirement of this scheme is 0.017 Mcft which is very meager and also there is standing pool of water near jack well location for a length of about 3.00 Kmtr due to elevated hard rock natural barrier across this river near Dandeli town and due to this always water available for all twelve months at jack well location of this scheme. Hence this source is most sustainable for this scheme. This River runs through forest and there are few habitations on river side with small population and even there is no any industrialization upstream of jack well location which enables good quality water at lifting point earlier studies reveals that turbidity of river is about 11.32 NTU and also we conducted water sample studies at jack well location in month of February and turbidity is less than 1 NTU. It is also planned to conduct turbidity test during rainy season for further study and any modification in raw water recycling plant. Following is the raw water sample test report submitted by RDW&S Division Belagavi.



3.2 Head work location: Location of head work selected near Dandeli town upstream of Dandeli town near Haliya town water supply jack well, where uncontaminated surface water is available. Land required for construction of jack well is government land and already consent from Haliyal town Panchayat accorded and recommended to District Commissioner for transferring of said land and permission awaited and may cleared by 20th of March. As per layout of head work location land required for Jack well is 20.00x17.00 mtr and 15.00x20.00 mtr for staff quarter and DG set room. Geographical position of head is 15°14'10.94"N 74°36'46.85"E and lowest bed level at river is 440.58 M above MSL. Highest flood level of Kali River at head work location is 447.725 M above MSL.

4. Components of the Project

4.1 Intake well:

RCC intake well 4.00 mtr dia mtr size and 5.60 mtr deep with CI grating of size 2.50 x 1.50 mtr size provided at river Bed. Lowest river bed level where intake well proposed is 440.580 and minimum water level available at river near intake well is 443.636 M above MSL.

4.2 Jack well



RCC jack well of 8.00 mtr with RCC pump house of size 13.00 x 8.00. mtr provided on left bank of Kali river. Total depth of jack well is 15.30 mtr whereas depth of excavation below GL is 12.42 mtr. Height of pump house above jack well is 8.00 mtr. Provision for moving crane of 10 tone capacity is made to enable the easy movement of pumps during repairs and maintenance.

4.3 Connecting pipe: RCC NP4 connecting pipe line of 600 mm dia and 40.00 mtr length is proposed. Discharge through connecting pipe is 0.4078 Cum /Sec which is two times the designed discharge. Velocity through pipe is 1.44 mtr /sec and slope fall from invert at intake well to invert of connecting pipe at jack well is 0.40 mtr.



4.4 Raw water pumping machinery:

As per economical section analysis it is proposed to install vertical turbine Pumping machinery (2 working+ 1 stand by) over jack well to lift raw water to WTP near Yadoga village. Duty condition of pump is 285.00 HP having discharge 89.435 LPS against head of 183.00 mtr.

4.5 Raw water rising main :

It is proposed to lay raw water rising main from jack well to WTP to lift raw water to WTP. As per economical section and water hammer analyses it is proposed to lay raw water rising of 457.00 mm dia MS FE 410 ERW 4.50 mm thick for 18500.00 mtr length. Velocity in pipe line for considering flow with ultimate population is 1.30 mtr /sec whereas for intermediate population is 1.14 mtr /sec. Total working head including all losses and static head is 202.00 mtr and maximum head including water hammer is 241.06 mtr. Provisions of pressure reducing valves, air valves, sluice valves, check valves and scour valves made also though pipeline thickness itself sufficient to cater 100% water hammer head provision of pilot operated spring loaded membrane valves proposed for catering negative pressure as well as positive pressure. Also air cushion valves provided at ridges for air release as well as air insertion to cater any negative pressures.

4.6 Water Treatment Plant :



It is proposed to construct WTP of 16.20 MLD with Aerator, Raw water flow channel, clariflocculator, rapid Sand Filters, recycling plant and Pure water sump. Location of WTP is near Yadoga village location where good strata and sloping ground is available. As per layout 2.50 Acres of land required and accordingly private land 2.50 Acres purchased near Yadoga village. The location of WTP is Location

15°19'42.00"N 74°44'5.00"E E Near Yadoga Cross and average GL 529.486 M above MSL. This land easily accessible from main road . Following are the components of WTP.

4.6.1 Aerator : It is proposed to construct RCC Cascade Type aerator of 24.20 Sqm with 05 cascade of size0.30m rise and 0.45 m thread with bottom cascade of 5.55 mtr dia. the collecting channel of 1.00 mwidth and 1.20 mtr depth including all CI fittings and accessories with all lead and lift.



- **4.6.2 Flash mixer:** It is proposed to construct RCC Flash mixer of 1.50 mtr dia and 4.50 mtr depth. Provision of Stainless-steel paddle 8 nos of size 0.15x0.15 mtr is made. For rotation of paddles at 120 RPM planetary gear box and driving motor proposed to install over flash mixer structure supported with girder of ISMB-10.
- 4.6.3 Flow channel: It is proposed to construct of RCC flow channel from Aerator to Flash mixer of size1.00 mtr width and 0.95 mtr depth and length of Flow channel is 7.50 mtr including fixing of V-notch for measurement of flow etc. complete as per specifications.
- **4.6.4 Clarifloculator:** It is proposed to construct 2 no's of RCC Clarifloculator with floculator of size 9.80 mtr and clarifier of size 21.90 mtr. dia. Height of clarifloculator is 4.10 mtr. Size of flocculation paddles 16 nos. of size 1.50x 0.40 is proposed.
- **4.6.5 Rapid sand filter:** It is proposed to Construct Rapid sand filter for filtration rate of 5500 lit./sqm/hour. 8 beds of twin filter beds each measuring 3.60 x 4.70 mtr. The height of rapid sand filter is 3.90 mtr. With free board of 0.50 mtr.
- **4.6.6 Pure Water Sump:** As per tender conditions it is proposed to construct pure water sump for 1.00 hr detention period. Capacity of pure water sump is 7.75 Lakhs having size 25.00x8.60mtr. Water depth in sump of 3.50 mtr considered having free board of 0.50 mtr. Three compartment each measuring 8.60x8.60x3.50 mtr proposed.
- 4.6.7 Pure Water Pumphouse & Panel room: It is proposed to construct pure water pump house to install pure water pumping machinery, starters and panel boxes as per pumping machinery arrangement drawing it is proposed to construct RCC framed analysis pump house of 25.80x8.00x6.00 mtr. Provision of pump loading room and panel room of 5.00 x 8.00 and 12.00 x 8.00 mtr provided respectively. For removing and installation of pumping machineries during maintenance electrically operated gantry girder of 10 tone capacity provided at pump house.
- **4.6.8 Recycling of Back wash:** It is proposed to construct installed recycling of back wash water plant consisting of Back wash collection tank, Sludge collection tank, Dissolved air floatation unit, Rapid plate settlers, Centrifuge and chemical dosing unit of 50000 LPH capacity.
- 4.6.9 Wash water tank : For Back washing to RSF at rate of 45 cum/sqm/Hr for 8 min washing period2.00 lakhs of Elevated storage tank on RSF Bed proposed to construct having head of 8.00 mtr above under drainage system.
- **4.6.10 Disinfection Unit :** For disinfection of water chlorine dosing unit of vaccume type chlorine gas unit of 2.50 Kg/Hr capacity provided to dose chlorine at rate of 3 PPM.



4.7 Pure water rising main :

It is proposed to lay Pure water rising main from WTP to 05 ZBTs to lift pure water to ZBTs and from there to all habitation by gravity. As per economical section and water hammer analyses it is proposed to lay Pure water rising main of various diameters as given in table below. Provisions of pressure reducing valves, air valves, sluice valves, check valves and scour valves made also though pipeline thickness itself sufficient to cater 100% water hammer head provision of pilot operated spring loaded membrane valves proposed for catering negative pressure as well as positive pressure. Also air cushion valves provided at ridges for air release as well as air insertion to cater any negative pressures. Following are details of pure water rising mains.

4.7.1 WTP to ZBT-1 : 273.00 mm dia MS pipe ERW 410 3.00 mm thick for 6000.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 1.16 mtr/sec and 1.01 mtr/sec respectively. Working head including all frictional losses and static head is 135.00 mtr and maximum head including water hammer is 215.00 mtr.

4.7.2 WTP to Junction B : 273.00 mm dia MS pipe ERW 410 3.60 mm thick for 6450.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 1.40 mtr/sec and 1.23 mtr/sec respectively. Working head including all frictional losses and static head is 232.00 mtr and maximum head including water hammer is 242.00 mtr.

4.7.3 Junction B to ZBT-2 : 219.00 mm dia MS pipe ERW 410 3.60 mm thick for 390.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 0.86 mtr/sec and 0.75 mtr/sec respectively. Working head including all frictional losses and static head is 47.00 mtr and maximum head including water hammer is 137.00 mtr.

4.7.4 Junction B to ZBT-3 : 219.00 mm dia MS pipe ERW 410 3.00 mm thick for 7560.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 1.33 mtr/sec and 1.17 mtr/sec respectively. Working head including all frictional losses and static head is 131.00 mtr and maximum head including water hammer is 236.00 mtr.

4.7.5 WTP to Junction D : 219.00 mm dia MS pipe ERW 410 4.00 mm thick for 8000.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 1.44 mtr/sec and 1.24 mtr/sec respectively. Working head including all frictional losses and static head is 176.00 mtr and maximum head including water hammer is 240.00 mtr.

4.7.6 Junction D to ZBT-4 : 150 mm dia DI pipe K-9 for 200.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 0.86 mtr/sec and 0.75 mtr/sec respectively. Working



head including all frictional losses and static head is 28.00 mtr and maximum head including water hammer is 143.00 mtr.

4.7.7 Junction D to ZBT-5 : 219.00 mm dia MS pipe ERW 410 4.00 mm thick for 6300.00 mtr length. Velocity in pipe line for ultimate population and Intermediate population is 0.92 mtr/sec and 0.79 mtr/sec respectively. Working head including all frictional losses and static head is 81.00 mtr and maximum head including water hammer is 163.00 mtr.

4.7.8 ISS-1 to M. Gouliwad & Magawad Jn -A : 140 mm dia HDPE PE-80 PN 12.50 for 4200.00 mtr length. Velocity in pipe line for ultimate population is 0.73 mtr/sec. Working head including all frictional losses and static head is 107.00 mtr and maximum head including water hammer is 93.00 mtr.

4.7.9 Junction C Jn to M Gawaliwad : 75mm dia HDPE PE-80 PN 10.00 for 2190.00 mtr length. Velocity in pipe line for ultimate population is 0.51 mtr/sec. Working head including all frictional losses and static head is 59.00 mtr and maximum head including water hammer is 58.00 mtr.

4.7.10 Junction C Jn to Magawad : 90 mm dia HDPE PE-80 PN 10.00 for 1550.00 mtr length. Velocity in pipe line for ultimate population is 1.24 mtr/sec. Working head including all frictional losses and static head is 73.00 mtr and maximum head including water hammer is 61.00 mtr.

4.7.11 ISS-2 to Gadiyal & Kumbakanhatti : 110 mm dia HDPE PE-80 PN 10.00 for 2480.00 mtr length. Velocity in pipe line for ultimate population is 0.94 mtr/sec. Working head including all frictional losses and static head is 81.00 mtr and maximum head including water hammer is 83.00 mtr.

4.7.12 ISS-3 to Shivapur & Guledkoppa village Jn -C : 140 mm dia HDPE PE-80 PN 12.50 for 1980.00 mtr length. Velocity in pipe line for ultimate population is 1.01 mtr/sec. Working head including all frictional losses and static head is 92.00 mtr and maximum head including water hammer is 98.00 mtr.

4.7.13 Junction C Jn to Guledkoppa : 75 mm dia HDPE PE-80 PN 10.00 for 3120.00 mtr length. Velocity in pipe line for ultimate population is 0.43 mtr/sec. Working head including all frictional losses and static head is 71.00 mtr and maximum head including water hammer is 67.00 mtr.

4.7.14 Junction C Jn to Shivapur : 140 mm dia HDPE PE-80 PN 10.00 for 250.00 mtr length. Velocity in pipe line for ultimate population is 0.89 mtr/sec. Working head including all frictional losses and static head is 68.00 mtr and maximum head including water hammer is 94.00 mtr.

4.8 Pure water intermediate sump : As per zoning requirement wherever residual head criteria not meeting in hydraulic analysis and to supply treated water to villages on higher elevation 03 nos of ISS proposed. Following are the details of intermediate pumping stations.

4.8.1 ISS -1 near M Gavaliwad village : M Gavaliwad and Magawad village in Zone II is on higher elevation and residual head criteria not meeting as per hydraulic calculation of gravity main analysis.



Hence it is proposed to construct IPS near M Gavaliwad village of one day capacity. RCC sump pump cum pump house of 1.25 Lakhs capacity having 6.60 mtr dia and 3.50 mtr depth is proposed with RCC pump house above sump of size 4.00x4.00 mtr. Land required for constriction IPS-1 is government land.

4.8.2 ISS -2 near Gadiyal village : M Gadiyal & Kumbakanatti villages in Zone III is on higher elevation and residual head criteria not meeting as per hydraulic calculation of gravity main analysis. Hence it is proposed to construct IPS near Gadiyal village of one day capacity. RCC sump pump cum pump house of 1.25 Lakhs capacity having 6.80 mtr dia and 3.50 mtr depth is proposed with RCC pump house above sump of size 4.00x4.00 mtr. Land required for constriction ISS-2 is government land.

4.8.3 ISS -3 near Shivapur village : Shivapur & Guledkoppa villages in Zone IV is on higher elevation and residual head criteria not meeting as per hydraulic calculation of gravity main analysis. Hence it is proposed to construct IPS near Shivapur village of one day capacity. RCC sump pump cum pump house of 2.25 Lakhs capacity having 9.00 mtr dia and 3.50 mtr depth is proposed with RCC pump house above sump of size 4.00x4.00 mtr. Land required for constriction ISS-3 is government land.

4.9 Pure water pumping machinery:

As per frictional loss analysis it is proposed to install Centrifugal split casing Pumping machinery (2 working+ 1 stand by) at Pure water sump well to lift pure water to ZBTs of 05 nos at various location. Provision of delivery pipe, suitable capacity soft starters and panel box, check valves isolation valves, mechanical joints are provided. Following are details of pumping machineries.

4.9.1 WTP to ZBT-1 : It is proposed to install centrifugal split casing pumping machinery of 75.00 HP (2W+1SB) having discharge 27.95 LPS and head 126.00 mtr.

4.9.2 WTP to ZBT-2 & ZBT-3 : It is proposed to install centrifugal split casing pumping machinery of 145.00 HP (2W+1SB) having discharge 34.00 LPS and head 201.00 mtr.

4.9.3 WTP to ZBT-4 & ZBT-5 : It is proposed to install centrifugal split casing pumping machinery of 145.00 HP (2W+1SB) having discharge 34.00 LPS and head 201.00 mtr.

4.9.4 WTP to ZBT-5 & ZBT-6 : It is proposed to install centrifugal split casing pumping machinery of 70.00 HP (2W+1SB) having discharge 21.93 LPS and head 151.00 mtr.

4.9.5 ISS -1 to M Gavaliwad & Magawad village : It is proposed to install submersible pumping machinery of 23.00 HP (1W+1SB) having discharge 6.58 LPS and head 107.00 mtr.

4.9.6 ISS -2 to Gadiyal & Kumbakanatti village: It is proposed to install submersible pumping machinery of 17.00 HP (1W+1SB) having discharge 5.801 LPS and head 81.00 mtr.



4.9.7 ISS -3 to Shivapur & Guledkoppa village: It is proposed to install submersible pumping machinery of 29.00 HP (1W+1SB) having discharge 10.13 LPS and head 98.00 mtr.

4.10 Zonal Balancing Tank: - To supply pure water to village ELSR,s by zoning of villages carried out satisfying the criteria mentioned in tender document for grouping of zones. Highest elevations are identified in each zone and ZBRs located from where pure water can be conveyed to all habitations by gravity. As per topography and tender document criteria 113 villages to be covered are divided is 08 zones Each zone having 15 to 20 habitations and accordingly at higher elevation in that zones balancing tanks proposed. Balancing tanks for capacity of 02 hrs detention period designed and accordingly following are the details of ZBTs. Compound wall to each ZBT proposed for protection purpose.



4.10.1 ZBT- 1 : It is proposed to construct ZBT-1 5.00 lakh capacity 15.00 mtr staging near Pala village. Ground level at ZBT-1 is 591.55 which is highest elevation in Zone –I and otlet let level required to supply treated water to all habitation in Zone –I and zone –II is 609.550. Land required for ZBT-1 is private land.

4.10.2 ZBT- 2 : It is proposed to construct ZBT-2 2.50 lakh capacity 25.00 mtr staging near Chatranal village. Ground level at ZBT-1 is 574.380 which is highest elevation in Zone –III and outlet level required to supply treated water to all habitation in Zone –III is 600.380. Land required for ZBT-2 is Government land.



4.10.3 ZBT- 3 : It is proposed to construct ZBT-3 3.50 lakh capacity 6.00 mtr staging or GLSR near Mundawad village. Ground level at ZBT-1 is 596.706 further highest elevation available up to peak of hillock but not reachable due to thick forest. Outlet level required to supply treated water to all habitation in Zone –IV & Zone IV-A is 602.706. Land required for ZBT-3 is forest land.

4.10.4 ZBT- 4 : It is proposed to construct ZBT-4 1.50 lakh capacity 18.00 mtr staging near Siddapur village.



Ground level at ZBT-4 is 551.210 which is highest elevation in Zone –V and outlet level required to supply treated water to all habitation in Zone –III is 569.210. Land required for ZBT-4 is Government land.



4.10.5 ZBT- 5 : It is proposed to construct ZBT-5 2.50 lakh capacity 21.00 mtr staging near Bhagawat village. Ground level at ZBT-4 is 569.563 which is highest elevation in Zone –VI and outlet level required to supply treated water to all habitation in Zone –VI & VI A is 593.263. Land required for ZBT-5 is forest land.

VILLAGE WISE LIST OF EXISTING AND PROPOSED STORAGE RESERVIORS

SI. No	No the	ation Den as nd per Itr/[2011 y	Water Dema nd in Itr/Da y	Existin g OHT Details	Existi ng Ciste rn Detai	Existi ng GLS R Datai	Existing Water Qty Storage		rment of Tanks	R e m ar	
	-	cens us	2047		Is	Detai Is	Capacity		Nos.	Capaci ty	k
1	Teragaon	5234	713745	2 Nos ELSR = 1.0 Lakh and 2 no of 0.50 Lakh	24.00	1x0.50	350000.00	-36860.00	-	-	
2	Arlawad	2148	292995	1 Nos ELSR = 1.0 Lakh and 1 no of 0.50 Lakh	16.00		150000.00	-21480.00	-	-	
3	Satnalli	1253	171020	1 Nos ELSR = 0.50 Lakh	16.00	-	50000.00	25012.50	1.00	25000.00	
4	Hunswad	1849	252195	1 Nos ELSR = 0.50 Lakh 1 no of 0.20 Lakh	16.00	-	70000.00	40627.50	1.00	50000.00	
5	Mundaki	5	850	-	1.00	-	2500.00	-2160.00	-	-	



6	Madnalli	1141	155720	2 Nos ELSR = 0.50 Lakh	-	-	100000.00	-31702.50	-	-	
7	Antrolli	475	64855	1 Nos ELSR = 0.50 Lakh	-	-	50000.00	-21567.50	-	-	
8	Homanalli	407	55760	1 Nos ELSR = 0.50 Lakh	6.00	-	50000.00	-25562.50	-	-	
9	Dusagi	1535	209440	1 Nos ELSR = 0.50 Lakh	-	-	50000.00	41885.00	1.00	50000.00	
10	Muttalmuri	1411	192610	2 Nos ELSR = 0.50 Lakh	-	-	100000.00	-15510.00	-	-	
11	Havagi	2170	296055	1 Nos ELSR = 1.0 Lakh and 1 no of 0.50 Lakh	-	1x 0.25	175000.00	-45120.00	-	-	
12	Timmapur	415	56695	-	7.00	-	0.00	24862.50	1.00	25000.00	
13	Magawad	573	78200	-	5.00	-	0.00	34297.50	1.00	35000.00	
14	Kerwad(H)	1362	186065	1 Nos ELSR = 0.50 Lakh	7.00	-	50000.00	31600.00	1.00	35000.00	
15	Magawad Gouliwad	163	22440	-	6.00	-	0.00	9817.50	1.00	10000.00	
16	Mangal wada	3455	471240	2 Nos ELSR = 0.50 Lakh	6.00	1 NW	100000.00	106720.0 0	1.00	100000.0 0	
17	Pala	701	95880	1 Nos ELSR = 0.50 Lakh	4.00	-	50000.00	-7967.50	-	-	
18	Kalasapur	182	25075	-	3.00	-	0.00	10965.00	1.00	10000.00	
19	Malawad	116	16065	-	4.00	-	0.00	7012.50	1.00	7500.00	
20	Yadoga	2142	292315	2 Nos ELSR = 0.50 Lakh	-	-	100000.00	28222.50	1.00	30000.00	
21	Bidrolli	856	116875	1 Nos ELSR = 0.25 Lakh	-	-	25000.00	26255.00	1.00	25000.00	
22	Modalgera	453	61965	-	5.00	-	0.00	27157.50	1.00	30000.00	



23	Ramapur	563	77010	-	3.00	-	0.00	33787.50	1.00	35000.00	
24	Handali	797	108800	1 Nos ELSR = 0.50 Lakh	-	1x.75 NW	50000.00	-2272.50	-	-	
25	Satmani	594	81090	-	5.00 NW	-	0.00	35572.50	1.00	35000.00	
26	Jawalli	560	76500	1 Nos ELSR = 0.50 Lakh	-	-	50000.00	-16467.50	-	-	
27	Kesrolli	993	135660	1 Nos ELSR = 0.50 Lakh	-	-	50000.00	9500.00	-	-	
28	Agasalakatta	273	37400	1 Nos ELSR = 0.25 Lakh	-	-	25000.00	-8595.00	-	-	
29	Kurigadda	279	38335	-	3.00	-	0.00	16787.50	1.00	20000.00	
30	Garadolli	662	90525	1 Nos ELSR = 0.50 Lakh	3.00	-	50000.00	-10305.00	-	-	
31	Gadagera	169	23290	-	4.00	-	0.00	10200.00	1.00	10000.00	
32	Kyatanagera	149	20485	1 Nos ELSR = 0.50 Lakh	3.00	-	50000.00	-41032.50	-	-	
33	Domagera	208	28645	-	4.00	-	0.00	12537.50	1.00	15000.00	
34	Ajagaon	412	56440	1 Nos ELSR = 0.25 Lakh	-	-	25000.00	-265.00	-	-	
35	Niralaga	876	119680	1 Nos ELSR = 0.50 Lakh	-	-	50000.00	2487.50	-	-	
36	Siddapur	69	9605	-	3.00	-	0.00	4207.50	1.00	5000.00	
37	Karalkatta	799	109055	2 Nos ELSR = 0.5 Lakh	-	1x 0.25	100000.00	-52187.50	-	-	
38	Halasi/Kesaro Ili Gram	42	5950	-	2.00	-	5000.00	-2407.50	-	-	
39	Kawalwad	3195	435880	1 Nos ELSR = 0.50 Lakh	-	-	50000.00	141207.5 0	1.00	150000.0 0	
40	Hampinahalli	1006	137360	1 Nos ELSR = 0.75 Lakh + 1 Nos of 0.50	-	-	125000.00	-64735.00	-	-	



41	Basavalli	694	94860	1 No ELSR = 0.50 Lakh	-	-	50000.00	-8392.50	-	-	
42	Doddakoppa	719	98260	-	6.00	-	0.00	43095.00	1.00	50000.00	
43	Jataga	687	93925	-	5.00	-	0.00	41182.50	1.00	50000.00	
44	Nandigadde	1148	156740	1 No ELSR = 0.5 Lakh	-	2x 0.50	150000.00	-81235.00	-	-	
45	Sankankoppa	1472	200855	2 Nos ELSR = 0.5 Lakh	-	-	100000.00	-11897.50	-	-	
46	Guledkoppa	165	22610	-	4.00	-	0.00	9902.50	1.00	10000.00	
47	Belavatagi	3267	445655	2 Nos ELSR = 0.5 Lakh	13.00	1x 1.00	200000.00	-4500.00	-	-	
48	Janaga	1426	194565	1 No ELSR = 0.5 Lakh	-	1x 1.00	150000.00	-64660.00	-	-	
49	K.K.Halli	1290	176120	1 No ELSR = 0.5 Lakh	-	-	50000.00	27265.00	1.00	25000.00	
50	Mugadkoppa	273	37400	-	5.00	-	0.00	16405.00	1.00	20000.00	
51	Murkawad	2606	355555	2 Nos ELSR = 0.5 Lakh	-	1x 0.75	175000.00	-19025.00	-	-	
52	Nagashettiko ppa	754	103105	-	4.00	-	0.00	45220.00	1.00	50000.00	
53	Shivapur	1197	163455	-	12.00	-	0.00	71697.50	1.00	75000.00	
54	Malawadi	625	85340	1 No ELSR = 0.5 Lakh	-	-	50000.00	-12557.50	-	-	
55	Chibbalgeri	862	117725	1 No ELSR = 0.5 Lakh	-	-	50000.00	1637.50	-	-	
56	Khamdolli	838	114410	1 No ELSR = 0.5 Lakh	-	-	50000.00	192.50	-	-	
57	Golehalli	582	79560	1 No ELSR = 0.25 Lakh	3.00	-	25000.00	9892.50	-	-	
58	Teganahalli	845	115345	1 No ELSR = 0.5 Lakh	-	-	50000.00	575.00	-	-	



								-	-		
59	Allolli	369	50405	-	3.00	-	0.00	22100.00	1.00	25000.00	
60	Jogankoppa	858	117045	1 No ELSR = 0.5 Lakh	1.00	-	50000.00	1340.00	-	-	
61	Ammankoppa	1011	138040	1 No ELSR = 0.5 Lakh	3.00	-	50000.00	10562.50	-	-	
62	Kumbakanatti	346	47345	-	4.00	-	0.00	20740.00	-	****	
63	Hosur	491	67150		5.00	-	0.00	29452.50	1.00	30000.00	
64	Tatvangi	1594	217600	2 No ELSR = 0.5 Lakh	-	-	100000.00	-4545.00	-	-	
65	Buzur Kanchanahalli	3196	435965	1 No ELSR = 1 Lakh	-	-	100000.00	91250.00	1.00	100000.0 0	
66	Banasgeri	955	130305	-	8.00	-	0.00	57162.50	1.00	60000.00	
67	Chatranal	246	33745	-	3.00 NW	-	0.00	14790.00	1.00	15000.00	
68	Hosahadagali	420	57460	-	7.00	-	0.00	25202.50	1.00	25000.00	
69	Guttibail	38	5355	-	4.00	500.00	0.00	2337.50	1.00	5000.00	
70	Mundwad	1551	211565	1 No ELSR = 0.5 Lakh	-	-	50000.00	42820.00	1.00	50000.00	
71	Murkwad Navagram	500	68340	-	3.00	-	0.00	29962.50	1.00	30000.00	
72	Bantargali	195	26775	-	5.00	-	0.00	11730.00	1.00	10000.00	
73	Jataga Gouliwad	315	43180	1 No ELSR = 0.25 Lakh	-	-	25000.00	-6087.50	-	-	
74	Hosavatnal	1250	170595	1 No ELSR = 0.25 Lakh	-	-	25000.00	49842.50	1.00	50000.00	
75	Pradhanhatti	510	69785	-	4.00	-	0.00	30600.00	1.00	30000.00	
76	Adkinahalla	290	39780	-	4.00	-	0.00	17425.00	1.00	20000.00	



77	Kalginakoppa	1978	269875	1 No ELSR = 0.5 Lakh	-	1x 0.25	75000.00	43405.00	1.00	50000.00
78	Tippingeri	347	47600	-	4.00	-	0.00	20867.50	1.00	20000.00
79	Gudmurgi	1069	145945	-	4.00	-	0.00	64005.00	1.00	20000.00
80	Sambrani	1169	159460	1 No ELSR = 0.5 Lakh	-	-	50000.00	19955.00	1.00	20000.00
81	Gundolli	2001	273020	1 No ELSR = 0.5 Lakh + 1 No ELSR = 1 Lakh	-	-	150000.00	-30235.00	-	-
82	Shenkankatte	525	71740	-	5.00	-	0.00	31450.00	1.00	30000.00
83	Bukkankoppa	525	71740	-	5.00	-	0.00	31450.00	1.00	30000.00
84	Ajminhal	623	85170	-	5.00	-	0.00	37357.50	1.00	35000.00
85	Kamtikoppa	250	34255	-	8.00	-	0.00	15002.50	1.00	15000.00
86	Pandraval	491	67150	1 No ELSR = 0.25 Lakh	-	-	25000.00	4452.50	-	-
87	AdkeHosur	636	86955	1 No ELSR = 0.5 Lakh	-	-	50000.00	-11877.50	-	-
88	JatgeHosur	96	13345	-	4.00	-	0.00	5822.50	1.00	5000.00
89	Bhagavati	1628	222190	1 No ELSR = 1.00 Lakh + 1 No = 0.5 Lakh	-	1x 0.25	175000.00	-77547.50	-	-
90	Tattigera Gouliwada	300	41140	-	2.00	-	0.00	18020.00	1.00	20000.00
91	Tattigeri	1495	204000	1 No ELSR = 0.5 Lakh	-	-	50000.00	39505.00	1.00	40000.00
92	Nilwani	289	39525	-	8.00	-	0.00	17340.00	1.00	20000.00
93	Ghadiyal	432	59160	-	3.00	-	0.00	25925.00	1.00	50000.00



94	Aalur	599	81855	1 No ELSR = 0.25 Lakh	-	-	25000.00	10912.50			
95	Kerwada	1385	189040	1 No ELSR = 0.25 Lakh	-	-	25000.00	57917.50	1.00	60000.00	
96	Halmaddi	389	53210	1 No ELSR = 0.5 Lakh	-	-	50000.00	-26667.50	-	-	
97	Tatgera	208	28645	-	3.00	-	0.00	12537.50	-	-	
98	Tatgera gouliwada	62	8670	1 No ELSR = 0.5 Lakh	2.00	-	50000.00	-46217.50	-	-	
99	Chotakanshir da	97	13430	-	2.00	-	0.00	5865.00	1.00	7500.00	
100	Ajminal Tanda	483	66130	-	5.00	-	0.00	28985.00	1.00	30000.00	
101	Pura	116	16065	-	4.00	-	0.00	7012.50	1.00	7500.00	
102	Kumbarkoppa	182	25075	-	5.00	-	0.00	10965.00	1.00	10000.00	
103	Adikehosuru	325	44625	-	4.00	-	0.00	19550.00	1.00	20000.00	
104	Bhagavti Gouliwada	842	115005	1 No ELSR = 0.25 Lakh	-	-	25000.00	25447.50	1.00	25000.00	
105	Addigera	275	37740	-	4.00	-	0.00	16532.50	1.00	20000.00	
106	Bhimanalli	280	38420	-	6.00	-	0.00	16830.00	1.00	20000.00	
107	Narnalli	188	25840	-	5.00	-	0.00	11305.00	1.00	15000.00	
108	Balshettikopp a	478	65450	1 No ELSR = 0.25 Lakh	3.00	-	25000.00	3687.50	-	-	
109	Chandrasurya wada		44115		1.00	-	0.00	19337.50	1.00	20000.00	
110	Donkanal	108	14960	-	5.00	-	0.00	6545.00	1.00	7500.00	



111	Raypattana	340	46580	-	4.00	-	0.00	20400.00	1.00	40000.00	
112	Rayapattana Gouliwada		44115	-	2.00	-	0.00	19337.50	1.00	40000.00	
113	Bommnalli	466	63750	1 No ELSR = 0.25 Lakh	2.00	-	25000.00	2965.00		-	
	Total	93954	12920 680								

4.11 Pure Gravity Mains: - As per tender criteria for number of villages in each zone about 15 to 20 and either population about 20000 and topography of project zoning and grouping of 113 villages carried out and accordingly hydraulic network analysis for each zone worked out. Appropriate material and class of pipe designed each node wise and tabulated (details of network analysis attached along with hydraulic designs. Provisions for sluice valves, scour valves, pressure reducing valves and air valves made in estimate as per CPHEEO NORMS and as per tender criteria. Following are details of gravity main pipe line.

Zone-I

No. of villages: 14.

Project Population 2047 : 24297

Minimum residual head : 4.627 mtr

Maximum residual head : 52.584 mtr

SI. No	Dia	Class of Pipe	Pipe material	Length
1	250	K -7	DI	1350.00
2	200	К -7	DI	2680.00
3	200	PE-100 PN 10	HDPE	1140.00
4	180	PE-100 PN 10	HDPE	3230.00
5	160	PE-100 PN 10	HDPE	2040.00
6	140	PE-100 PN 10	HDPE	510.00
7	125	PE-100 PN 10	HDPE	50.00
8	110	PE-100 PN 10	HDPE	4550.00



	r			
9	90	PE-100 PN 10	HDPE	1740.00
10	75	PE-100 PN 10	HDPE	3695.00
11	63	PE-100 PN 10	HDPE	5280.00
12	75	PE-100 PN 12.50	HDPE	2540.00
	Total			28805.00

Zone-II

No. of villages: 13.

Project Population 2047 : 26187

Minimum residual head : 4.206 mtr

Maximum residual head : 46.980 mtr

SI. No	Dia	Class of Pipe	Pipe material	Length
1	250	K -7	DI	4790.00
2	200	K -7	DI	2810.00
3	200	PE-100 PN 10	HDPE	200.00
5	160	PE-100 PN 10	HDPE	1410.00
6	140	PE-100 PN 10	HDPE	1980.00
7	125	PE-100 PN 10	HDPE	1250.00
8	110	PE-100 PN 10	HDPE	3740.00
9	90	PE-100 PN 10	HDPE	760.00
10	75	PE-100 PN 10	HDPE	3220.00
11	63	PE-100 PN 10	HDPE	4985.00
	Total			25145.00

Zone-III

No. of villages: 19. Project Population 2047 : 24057 Minimum residual head : 4.206 mtr Maximum residual head : 46.980 mtr



SI. No	Dia	Class of Pipe	Pipe material	Length
1	250	K -7	DI	100.00
2	200	K -7	DI	430.00
3	200	PE-100 PN 10	HDPE	2300.00
4	180	PE-100 PN 10	HDPE	2070.00
5	160	PE-100 PN 10	HDPE	630.00
6	140	PE-100 PN 10	HDPE	6590.00
7	110	PE-100 PN 10	HDPE	6420.00
8	90	PE-100 PN 10	HDPE	3970.00
9	75	PE-100 PN 10	HDPE	6900.00
10	63	PE-100 PN 10	HDPE	5140.00
	Total			34550.00

Zone-IV

No. of villages: 14.

Project Population 2047 : 19895

Minimum residual head : 4.720 mtr

Maximum residual head : 67.610 mtr

SI. No	Dia	Class of Pipe	Pipe material	Length
1	250	K -7	DI	4440.00
2	200	PE-100 PN 10	HDPE	1240.00
3	180	PE-100 PN 10	HDPE	4020.00
4	140	PE-100 PN 10	HDPE	100.00
5	110	PE-100 PN 10	HDPE	4900.00
6	90	PE-100 PN 10	HDPE	3005.00
7	75	PE-100 PN 10	HDPE	100.00



8	3	63	PE-100 PN 10	HDPE	4070.00
		Total			21875.00

Zone-IV A

No. of villages: 14.

Project Population 2047 : 17440

Minimum residual head : 3.23 mtr

Maximum residual head : 67.01 mtr

SI. No	Dia	Class of Pipe	Pipe material	Length
1	200	K-7	DI	8750.00
2	200	PE-100 PN 10	HDPE	330.00
3	110	PE-100 PN 10	HDPE	1170.00
4	90	PE-100 PN 10	HDPE	2260.00
5	75	PE-100 PN 10	HDPE	360.00
6	63	PE-100 PN 10	HDPE	740.00
7	200	PE-100 PN 12.50	HDPE	3220.00
8	160	PE-100 PN 12.50	HDPE	2780.00
9	75	PE-100 PN 12.50	HDPE	3595.00
10	63	PE-100 PN 12.50	HDPE	2630.00
	Total			25835

Zone-V

No. of villages: 21. Project Population 2047 : 14425 Minimum residual head : 4.69 mtr Maximum residual head : 51.21 mtr



SI. No	Dia	Class of Pipe	Pipe material	Length
1	200	K-7 DI 2		100.00
2	200	PE-100 PN 10	HDPE	2190.00
3	180	PE-100 PN 10	HDPE	1085.00
4	160	PE-100 PN 10	HDPE	850.00
5	140	PE-100 PN 10	HDPE	8640.00
6	125	PE-100 PN 10	HDPE 1590.00	
7	110	PE-100 PN 10	HDPE	11180.00
8	90	PE-100 PN 10 HDPE		245.00
9	75	PE-100 PN 10 HDPE		2370.00
10	63	PE-100 PN 10 HDP		18580.00
11	110	PE-100 PN 12.50	HDPE	700.00
12	90	PE-100 PN 12.50	HDPE	550.00
13	63	PE-100 PN 12.50	HDPE	700.00
14	63	PE-100 PN 16.00	HDPE	700.00
	Total			49480.00

Zone-VI No. of villages: 15. Project Population 2047 : 17642 Minimum residual head : 3.502 mtr. Maximum residual head : 44.416 mtr.



SI. No	Dia	Class of Pipe	Pipe material	Length
1	200	K -7	DI	830.00
2	200	PE-100 PN 10	HDPE	3985.00
3	160	PE-100 PN 10	HDPE	2200.00
4	140	PE-100 PN 10	HDPE	1830.00
5	110	PE-100 PN 10	HDPE	10165.00
6	90	PE-100 PN 10	HDPE	2095.00
7	75	PE-100 PN 10	HDPE	1975.00
8	63	PE-100 PN 10	HDPE	9985.00
	Total			32050.00

Zone-VI A

No. of villages: 15.

Project Population 2047 : 17642

Minimum residual head : 3.502 mtr

Maximum residual head : 44.416 mtr

SI. No	Dia	Class of Pipe	Pipe material	Length
1	180	PE-100 PN 10	HDPE	3700.00
2	110	PE-100 PN 10	HDPE	200.00
3	90	PE-100 PN 10	HDPE	240.00
4	75	PE-100 PN 10	HDPE	990.00
5	140	PE-100 PN 12.50	HDPE	4930.00
6	63	PE-100 PN 12.50	HDPE	8430.00
7	75	PE-100 PN 16.00	HDPE	3400.00
8	63	PE-100 PN 16.00	HDPE	8815.00
	Total			30705.00



SI No	Zones	Length of pipeline (m)	No of Villages Covered	Population (2047)
1	Zone-1	28805	14	24297
2	Zone-2	25145	13	26187
3	Zone-3	34550	19	24057
4	Zone-4	21875	10	19895
5	Zone-4A	25835	10	17440
6	Zone-5	49480	21	14425
7	Zone-6	32055	15	17642
8	Zone-6A	30705	10	7540
то	TAL QUANTITY	248450.00	113	152008

Total length of gravity main

4.12 AUTOMATION AND MANAGEMENT SYSTEM

In traditional drinking water supply system is facing many problems related to filtration, pumping of water, distribution of water and testing of water. Conventional water supply department comprises three different sections for water supply. First is the pumping station, which does the sucking of water from water source. The second section is a filtration department in which raw water get treated as per norms and requires automation and logic controls to all components of WTP, also requires measurement of dosing of chemicals and final quality of treated water. Third section is the distribution section through which water is distributed to all ZBTs by pumping from proposed PWS and distributed to village ELSRs through gravity. This third sections requires measurement of water supplied at each village reservoirs and also bulk supply to all MBTs. This is mainly required to identify leakages in pipeline and unaccounted for water. Currently these three sections are working independently. The major problems in water supply system are leakage or wastage of water and the majority rural public is using unmeasured water supply, which results decrease in getting only part of area very good supply and remaining area without proper water supply. Automation and SCADA for 113 habitation of Haliyal taluka MVS includes required and necessary automation from the point of jackwell to the distribution of pure water up to Zonal balancing reservoirs to enable automated, Remote or Semi-Automated operations of jackwell, WTP, raw water Pumping stations, Pure water pumping stations, Intermediate Pumping stations and Zonal Balancing



Reservoirs to achieve maximum efficient supply of drinking water according to NORMS and designed quality and quantum of drinking water to each village. The automation and instrumentation is divided into following phases:

4.12.1 Jack well instrumentation and Automation

4.12.2 WTP instrumentation and automation

4.12.3 Instrumentation and automation of Pumping station at WTP

4.12.4 Instrumentation and automation at all ZBTs

4.12.5 Jack well Automation: Automation at jack well consists of PLC panel with operator console display, valve actuators, flow meters, pressure sensors and communication devices. It is expected that the jack well can be monitored and controlled from the WTP control station for its operations. Various parameters such as energy consumption, flow rate, pressure, temperatures, water depth in jack well and velocity in pipeline etc. shall be monitored and recorded continuously and the pumping machineries at jack well will be programmed to perform automated valve and pump operations.

4.12.6 WTP Automation and Pumping station: Water treatment plant automation shall include automation of Clarifiers, Filter beds, pumping station. Wherein operations of filter beds such as backwashing of beds, clarifier operations, automated sludge drain etc. are to be programmed to operate the plant as per designed logics as per the required capacity. WTP will also have Control station with Computer server hosting Scada software which will act as central station to monitor and control the entire scheme including the pumping station. All the parameters such as inlet and outlet flows, pressures, tank levels, quality parameters shall be recorded and tabulated to prepare daily report of the scheme. Pump house, similar to the jack well shall be entirely monitored and controlled from the control station and shall be programmed for automated operations. All the valves of WTP and Pump house shall be fitted with valve actuators.

4.12.7 Automation at ZBTs: ZBTs shall be fitted with a Remote Terminal unit consisting PLC, to operate monitor and operate valves at ZBTs as per designed flow. Tank levels, flow data, pressure shall be monitored real time from the control station 24x7. Remote terminal units shall perform programmed operations from WTP control station.

4.12.8 Automation at village reservoirs: Village storage reservoirs shall be fitted with AMR electromagnetic flow meter for recording daily quantum of water supply to each village. Wherever GSM coverage available arrangement made to transfer data to control station at WTP. Due to thick forest wherever GSM network not available manual data will be recorded and entered in control station and further tabulated to prepare daily report.



4.12.9 Remote monitoring and monitoring of Critical pressure points: Critical pressure points in the distribution system will be continuously monitored through pressure sensors fixed at critical points sending real time data to the computer server.

4.12.10 Extent of Scope of Work: The scope of work under this Turnkey Contract on Single Responsibility basis includes, but not limited to, designs and drawings, supply, installations of brand new PLC SCADA System including all equipment's, sensors, actuators, and installation of all mechanical, electrical, instrumentation equipment, testing of all the units of the system in sections and thereafter commissioning of the entire system, trial runs, supply of spares, tools and plants at the end of execution period plus five year defect liability period and subsequent Operation & Maintenance of the developed system and repair of defects.

4.12.11 Major Components of Work: The scope of this work covers the design and execution of works with an ultimate objective to automate Jack Well (Head works), Water Treatment Plant, intermediate pumping stations, ZBT level monitoring. The system should be designed in such a manner so as to operate the water treatment plant in auto/semi auto mode with minimal human intervention in normal course of operation.

4.12.12 Jack Well Instrumentation: Full Bore Electromagnetic Flow Meter with remote display for Raw Water line at jack well with all specials, hardware and allied civil work, including supplying, installing, testing, commissioning and laying of cables for RS 485 modbus communication, with PLC SCADA System. Electrical actuators for pump outlet vales with all accessories and fitment and necessary onsite fabrication, wiring and interfacing with operator console and manual override for each actuator. Multi-Function Meter with Modbus RS.485 communication system with all accessories and interfacing with main power panel. The energy data should be communicated to PLC SCADA System. Installation of protection relays for phase failure, phase reversal, phase imbalance, over voltage, under voltage, earth leakage etc, and the faults should be communicated to PLC SCADA system. Operator Console for Raw water Pump house with PLC and HMI with all power and communication wiring and interfacing with pump motor starters, communication system with PLC SCADA system for remote operation with manual override. Pressure sensors for VT pump outlets with cables and other accessories required to be connected to PLC SCADA system. Direct Satellite based telecommunication with minimum speed of 512 kbps at WTP with 99.9% uptime including indoor and outdoor unit installation commissioning with all necessary documentation and permissions from the service provider with operation and maintenance of the internet facility with minimum 1 static IP and 4 LAN connections for PLC SCADA System. This satellite telecommunication



system shall be powered from UPS. UPS for satellite-based communication system, PLC HMI Panel and energy meter, suitable for required backup Water Treatment Plant:

4.12.13 Raw Water Inlet Instrumentation : The Raw water inlet instrumentation and allied work included but not limited to full Bore Electromagnetic Flow Meter with remote display for Raw Water inlet line with all specials, hardware and allied civil work, including supplying, installing, testing, commissioning and laying of cables for RS 485 Modbus communication, with PLC SCADA System. Online Water Quality monitoring system for raw water including online turbidity meter, with local display of test results and RS 485 Modbus communication with PLC SCADA System arrangement for sample inlet and drain system for testing equipment's, installation, commissioning and onsite calibration of the equipment's. PLC control panel for raw water instrumentation, to communicate with inlet flow meter, turbidity meters, starter panels of clarifier, flash mixer, This PLC shall communicate with PLC at filter house and hence connected to SCADA system at master control room

4.12.14 Clariflocculator Instrumentation: Clariflocculator automation and allied work included but not limited to: Instrumentation panel with PLC for automation of scraper motor with manual override, including supplying, installation and commissioning. Integration of PLC panel with existing starter of the motor including all wiring and communication with PLC SCADA System for remote operation. Online Water Quality monitoring system for raw water including online turbidity meter, with local display of test results and RS 485 modbus communication with PLC SCADA System, including all necessary arrangement for sample inlet and drain system for testing equipment's, installation, commissioning and onsite calibration of the equipment.

4.12.15 Rapid Sand Filter Bed Automation: Automated Filter bed system and allied work included but not limited to Operator Console including PLC and HMI for automatic backwash arrangement for each filter beds with loss of head indicator, with manual override Electrical actuators for filter bed inlet, outlet and wash water outlet and drain vales of all filter beds with all accessories and fitment and necessary onsite fabrication, wiring and interfacing with operator console and manual override for each actuator. Wash Water Tank level monitoring with Ultrasonic Level Transmitter and Tank level control with pump automation of existing wash water pumps, including supply of control panel with all necessary wiring and PLC SCADA system communication for remote operation and manual override.

4.12.16 Pure Water Pump House/ intermediate pumping station Automation and Instrumentation: Operator Console for WTP Pump house with PLC with all power and communication wiring and interfacing with pump motor starters, communication system with PLC SCADA system for remote operation of pure water pumps with manual override. Multi-Function Meter with modbus RS 485 communication system



with all accessories and interfacing with main power panel. The energy data should be communicated to PLC SCADA System. Installation of protection relays for phase failure, phase reversal, phase imbalance, over voltage, under voltage, earth leakage etc, and the faults should be communicated to PLC SCADA system for wtp pump house and intermediate pumping stations. Electrical Actuators for pump outlet valves with manual override. Valves should operate remotely from SCADA system or locally from operator panel at pump house. Pressure sensor for pump outlet to monitor pressure on the outlet line. Ultrasonic Level Monitor with 4-20mA output for pure water sump level monitoring with local display and communication with PLC and SCADA system. Full Bore Electromagnetic Flow Meter with remote display for pump outlet lines with all specials, hardware and allied civil work, including supplying, installing, testing, commissioning and laying of cables for RS 485 modbus communication with PLC SCADA System. Automatic operation of pumps as per tank level and totalized outflow of pure water as per daily demand set by the operator. Pressure sensor with all accessories for communication with PLC system. Ultrasonic level sensor for sump level monitoring with all accessories to communicate with PLC SCADA system. Amperometry based online chlorine, pH analyser with local display, with all accessories and sample conditioning unit with analog / RS 485 communication for PLC SCADA communication of real time display of residual chlorine at WTP pump house. Portable battery-operated digital photometer (2 sets) for residual chlorine analysis at the field, near consumer taps, reservoirs on regular basis. The photometer should be supplied with the all consumables for testing during complete operation and maintenance period of 5 years from the date of commissioning.

4.12.17 Master Control Room Setup in WTP Premises: Master Control Room setup and its allied work includes but not limited to setting up of supervisory control room in WTP premises for monitoring the plant operation. The air-conditioned room shall be provided by the employer to accommodate computer hardware, instruments, UPS and furniture items. Required KVA true Online UPS with USB / LAN connectivity with backup for minimum 4 Hrs, with necessary wiring and protection fuses and other accessories. Provide, install, operate and maintain Computer and allied accessories with configuration as specified in the specifications of instrumentation with all licensed copies of operating software, antivirus software, other necessary software, laser printer with stationary for printing reports etc. SCADA Runtime with development software and application software design and development with licensed version as per tag requirement, screens and logic development, communication with PLC panels in the WTP. Database generation for water quality and quantity audit, automatic daily, weekly and monthly reports in soft and hard copy to be submitted to employer. Direct Satellite based telecommunication with minimum speed of 1 MBPS at WTP with 99.9% uptime including indoor and outdoor unit installation commissioning with all



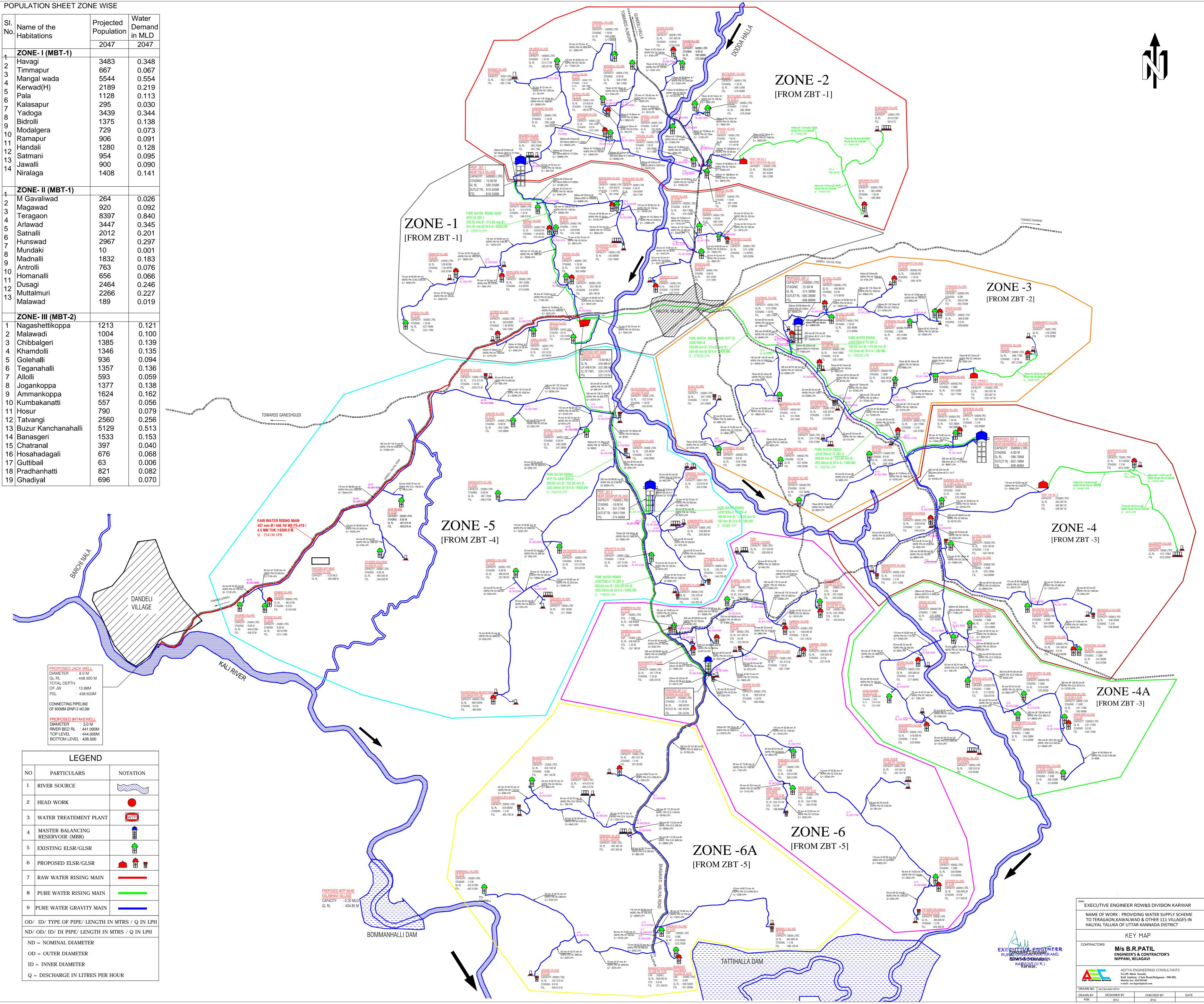
necessary documentation and permissions from the service provider with operation and maintenance of the internet facility with minimum 1 static IP and 4 LAN connections for PLC SCADA System. This satellite telecommunication system shall be powered from UPS. Web Viewer for SCADA with log in ID and password protection for remote monitoring of SCADA from outside over internet. The control systems shall be designed for fully automatic operation of the process. However, in the event of failure of the automatic controls or by operator choice it shall be possible to revert to manual operation of each item of the WTP. The control systems shall be designed to recover fully to a normal operational state on restoration of power following a power failure without manual intervention. This requirement includes recovery from the L.T. failure as well as the control system power failure. Master Control Centre shall be interfaced with the PLC system of each functional unit on the water Transmission system, such as pumping stations, water treatment works, electricity supply system, etc.

4.12.18 Zonal Balancing Tank monitoring: All Zonal balancing tanks instrumentation setup for each reservoir and its allied work includes but not limited to full Bore Electromagnetic Flow Meter with remote display for reservoir inlet lines with all specials, hardware and allied civil work, including supplying, installing, testing, commissioning and laying of cables for RS 485 Modbus communication with PLC SCADA System. Level sensors shall be installed at each of the tank to communicate with Remote terminal unit allowing real time monitoring of tank levels. Remote terminal units (RTU) panels for each of the reservoir to gather real time readings from installed sensors and communicating same to the master control room. Flow and levels shall be monitored real time through mobile based application software as well as master control room.



SI. No.	Name of the Habitations	Projected Population	Water Demanc in MLD
		2047	2047
	ZONE- IV (MBT-3)		
1	Kawalwad	5128	0.513
2	Hampinahalli	1616	0.162
3	Basavalli	1116	0.112
4	Doddakoppa	1156	0.116
5	Jataga	1105	0.111
6	Nandigadde	1844	0.184
7	Sankankoppa	2363	0.236
8	Janaga	2289	0.229
9	Bantargali	315	0.032
10	Jataga Gouliwad	508	0.051
11	Guledkoppa	266	0.027
	Belavatagi	5243	0.524
	K.K.Halli	2072	0.207
14	Mugadkoppa	440	0.044
	Murkawad	4183	0.418
	Shivapur Muradurad	1923	0.192
	Mundwad	2489 804	0.249
	Murkwad Navagram Hosavatnal	804 2007	0.080 0.201
	Adkinahalla	2007 468	0.201
20		-UU	0.0+/
	Zone-V (MBT-4)		
1	Kesrolli	1596	0.160
	Agasalakatta	440	0.044
3	Kurigadda	451	0.045
4	Rayapattana Gouliwada	519	0.052
5	Raypattana	548	0.055
6	Garadolli	1065	0.107
7	Gadagera	274	0.027
8	Kyatanagera	241	0.024
9	Domagera	337	0.034
	Ajagaon	664	0.066
	Siddapur	113	0.011
	Karalkatta	1283	0.128
	Halasi	70	0.007
	Tippingeri	560	0.056
	Gudmurgi	1717 295	0.172
	Kumbarkoppa Alur	295 963	0.030
	Tatagera	903 337	0.098
	Tatagera Gavaliwada	102	0.034
	Kerawad	2224	0.010
	Halmaddi	626	0.063
		020	0.000
21			
21	Zone-VI (MBT-5)		
1		3175	0.318
1 2	Zone-VI (MBT-5)	3175 1876	0.318 0.188
1 2 3	Zone-VI (MBT-5) Kalginagoppa	1876 3212	0.188 0.321
1 2 3 4	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte	1876 3212 844	0.188 0.321 0.084
1 2 3 4 5	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa	1876 3212 844 844	0.188 0.321 0.084 0.084
1 2 3 4 5 6	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal	1876 3212 844 844 1002	0.188 0.321 0.084 0.084 0.100
1 2 3 4 5 6 7	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa	1876 3212 844 844 1002 403	0.188 0.321 0.084 0.084 0.100 0.040
1 2 3 4 5 6 7 8	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval	1876 3212 844 844 1002 403 790	0.188 0.321 0.084 0.084 0.100 0.040 0.079
1 2 3 4 5 6 7 8 9	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur	1876 3212 844 844 1002 403 790 1023	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102
1 2 3 4 5 6 7 8 9 10	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur	1876 3212 844 844 1002 403 790 1023 157	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016
1 2 3 4 5 6 7 8 9 10 11	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada	1876 3212 844 844 1002 403 790 1023 157 484	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048
1 2 3 4 5 6 7 8 9 10 11 12	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri	1876 3212 844 844 1002 403 790 1023 157 484 2400	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240
1 2 3 4 5 6 7 8 9 10 11 12 13	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani	1876 3212 844 844 1002 403 790 1023 157 484 2400 465	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047
1 2 3 4 5 6 7 8 9 10 11 12 13 14	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.078
1 2 3 4 5 6 7 8 9 10 11 12 13 14	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura	1876 3212 844 844 1002 403 790 1023 157 484 2400 465	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047
1 3 4 5 6 7 8 9 10 11 12 13 14 15	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5)	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.078
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189	0.188 0.321 0.084 0.084 0.100 0.040 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.078 0.019
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189	0.188 0.321 0.084 0.084 0.100 0.040 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.078 0.078 0.019
1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera Bhimanalli	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189 444 452	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.078 0.078 0.019
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera Bhimanalli Narnalli	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189 444 452 304	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.078 0.078 0.078 0.019
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera Bhimanalli Narnalli Chotakanshirda	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189 444 452 304 158	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.078 0.078 0.078 0.019
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera Bhimanalli Narnalli Chotakanshirda Balshettikoppa Donkanal Bhagavati	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189 444 452 304 158 770 158 770 176 2614	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.047 0.078 0.019 0.044 0.045 0.030 0.016 0.030 0.016 0.077 0.018 0.261
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera Bhimanalli Narnalli Chotakanshirda Balshettikoppa Donkanal Bhagavati Bhagavati Bhagavati Gouliwada	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189 444 452 304 158 770 176 2614 1353	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.047 0.078 0.019 0.044 0.045 0.030 0.016 0.030 0.016 0.077 0.018 0.261 0.135
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24	Zone-VI (MBT-5) Kalginagoppa Sambrani Gundolli Shenkankatte Bukkankoppa Ajminhal Kamtikoppa Pandraval AdkeHosur JatgeHosur Tattigeri Gouliwada Tattigeri Nilwani Ajminal Tanda Pura ZONE- VIA (MBT-5) Addigera Bhimanalli Narnalli Chotakanshirda Balshettikoppa Donkanal Bhagavati	1876 3212 844 844 1002 403 790 1023 157 484 2400 465 778 189 444 452 304 158 770 158 770 176 2614	0.188 0.321 0.084 0.084 0.100 0.040 0.079 0.102 0.016 0.048 0.240 0.047 0.047 0.047 0.078 0.019 0.044 0.045 0.030 0.016 0.030 0.016 0.077 0.018 0.261

			Mator
SI.	Name of the	Projected	Water Demand
No.	Name of the Habitations	Population	in MLD
	Παριτατίοπο	2047	2047
	ZONE- I (MBT-1)	2047	2047
1	Havagi	3483	0.348
2	Timmapur	667	0.067
3	Mangal wada	5544	0.554
4	Kerwad(H)	2189	0.219
5	Pala	1128	0.113
6	Kalasapur	295	0.030
7	Yadoga	3439	0.344
8	Bidrolli	1375	0.138
9	Modalgera	729	0.073
10	Ramapur	906	0.091
11	Handali	1280	0.128
12	Satmani	954	0.095
13 14	Jawalli	900	0.090
14	Niralaga	1408	0.141
	ZONE- II (MBT-1)		
1	M Gavaliwad	264	0.026
2 3	Magawad	920	0.020
	Teragaon	8397	0.840
4	Arlawad	3447	0.345
5	Satnalli	2012	0.201
6	Hunswad	2967	0.297
7	Mundaki	10	0.001
8	Madnalli	1832	0.183
9	Antrolli	763	0.076
10	Homanalli	656	0.066
11	Dusagi	2464	0.246
12	Muttalmuri	2266	0.227
13	Malawad	189	0.019
	ZONE- III (MBT-2)		
1	Nagashettikoppa	1213	0.121
2	Malawadi	1004	0.100
3	Chibbalgeri	1385	0.139
4	Khamdolli	1346	0.135
5	Golehalli	936	0.094
6	Teganahalli	1357	0.136
7	Allolli	593	0.059
8	Jogankoppa	1377	0.138
9	Ammankoppa	1624	0.162
10	Kumbakanatti	557	0.056
11	Hosur	790	0.079 0.256
12 13	Tatvangi Buzur Kanchanahalli	2560	0.256
13	Buzur Kanchanahalli Banasgeri	5129	0.513
14	Banasgeri Chatranal	397	0.153
15 16	Hosahadagali	676	0.040
17	Guttibail	63	0.008
18	Pradhanhatti	821	0.082
19	Ghadiyal	696	0.002



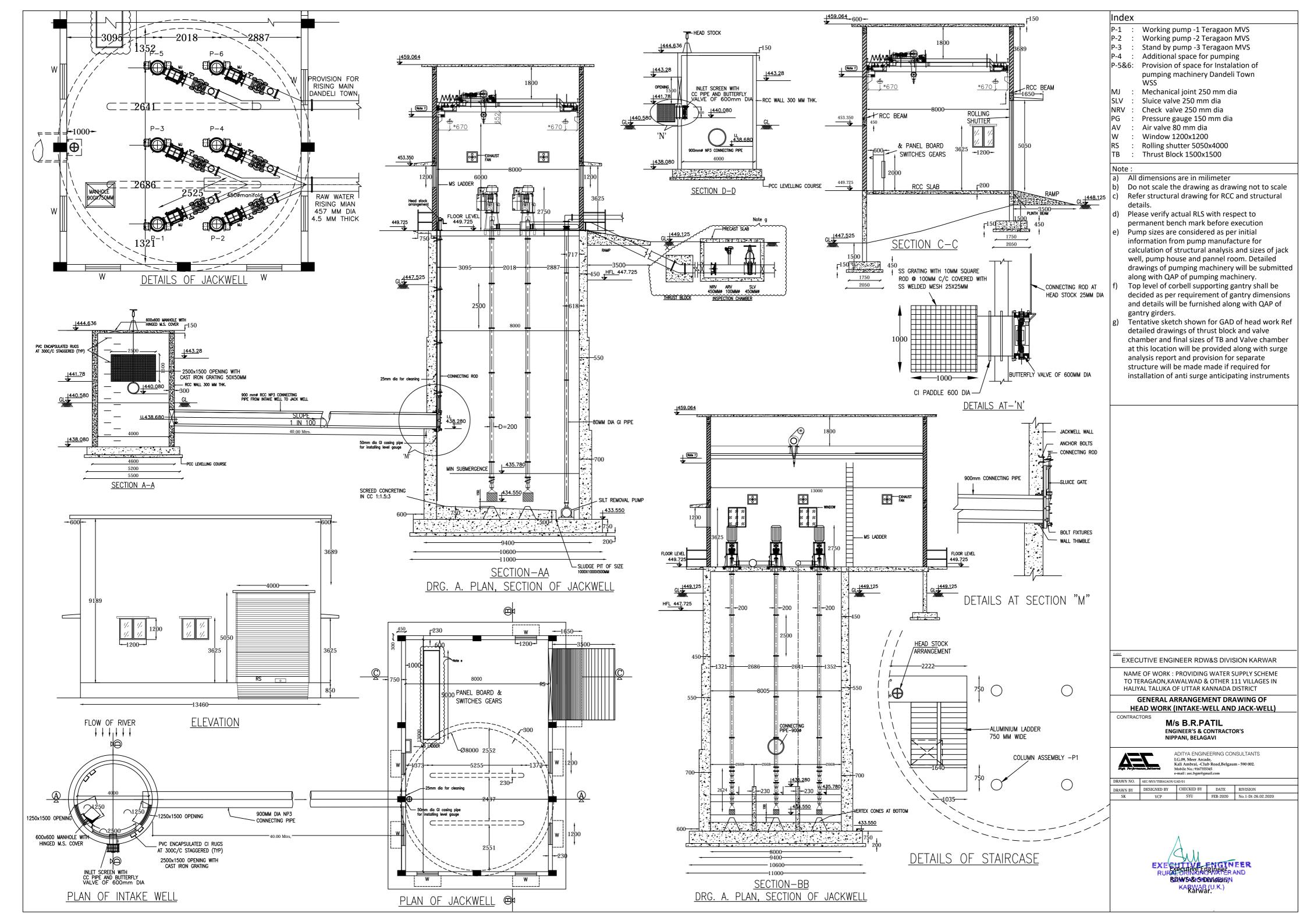
PUMPING TO VILLAGES FROM PR.ISS

1	ISS -1(Zone 2)	M. Gouliwad
2	155 - I(ZUIIE Z)	Magwad
3	100 2(7ano 2)	Ghadiyal
4	ISS -2(Zone 3)	Kumbakanatti
5	ISS -3(Zone 4)	Shivapur
6	133 -3(ZUIIE 4)	Guledkoppa

TOTAL RAW WATER DEMAND

Month in liters: 48,45,25,500.00
Year in liters: 5,89,50,60,250.00
Year in mcft : 207.939
Year in tmc : 0.208
SUPPLY RATE : 85 LPCD
PUMPING HOURS : 22 HRS







ಸಂಖ್ಯೆ: ಜಸಂಇ 85 ಎಂಪಿಜಡ್ 2017

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ, ಎಕಾಸ ಸೌಧ, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 14.10.2019

SE, P8.1 207

ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ,

ಇವರಿಂದ:

ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ. ವಿಕಾಸಸೌಧ, ಬೆಂಗಳೂರು.

ಇವರಿಗೆ:

1) ಮುಖ್ಯ ಇಂಜನೀಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ ಆನಂದರಾವ್ ವೃತ್ತ, ಬೆಂಗಳೂರು.

2) ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು. ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ. ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೆ,

ವಿಷಯ: ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ ಹಳಿಯಾಳ ತಾಲ್ಲೂಕಿನ ತೇರಗಾಂವ, ಕಾವಲವಾಡ ಮತ್ತು 91 ಗ್ರಾಮಗಳಿಗೆ ಕಾಳಿ ನದಿಯಿಂದ 0.20 ಟಿ.ಎಂ.ಸಿ ನೀರನ್ನು ಕುಡಿಯುವ ನೀರಿಗೆ ಹಂಚಿಕೆ ಮಾಡುವ ಬಗ್ಗೆ. ಉಲ್ಲೇಖ: ಇದೇ ಸಮಸಂಖ್ಯೆಯ ಪತ್ರ ದಿನಾಂಕ: 17.10.2017, 05.04.2018 ಮತ್ತು 31.05.2019.

ಮೇಲ್ಯಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ ಹಳಿಯಾಳ ತಾಲ್ಲೂಕಿನ ತೇರಗಾಂವ, ಕಾವಲವಾಡ ಮತ್ತು 91 ಗ್ರಾಮಗಳಿಗೆ ಕಾಳಿ ನದಿಯಿಂದ 0.20 ಟಿ.ಎಂ.ಸಿ ನೀರನ್ನು ಕುಡಿಯುವ ನೀರಿಗೆ ಹಂಚಿಕೆ ಮಾಡುವ ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಜಾಯತ್ ರಾಜ್ ಇಲಾಖೆಯ ಪ್ರಸ್ತಾವನೆಗೆ ಅನುಮೋದನೆ ನೀಡಿ ಸದರಿ ಇಲಾಖೆಗೆ ತಿಳಿಸಲಾಗಿದೆ ಎಂಬ ವಿಷಯವನ್ನು ತಮಗೆ ತಿಳಿಸಲು ನಾನು ನಿರ್ದೇಶಿತನಾಗಿದ್ದೇನೆ.

(ಬಿ. ಹರಿನಾರಾಯಣ) ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ (ತಾಂತ್ರಿ-5)



Attested" ERAND RAL DRINKING WA SANITATION DIVISION KARWAR (U.K.)

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ಅಧಿಸ್ಥಕರು-4		

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ಜಿಲ್ಲಾ ನಗರಾಭಿವೃದ್ಧಿ ಕೋಶ, ಜಿಲ್ಲಾಧಿಕಾರಿಗಳ ಕಾರ್ಯಾಲಯ

ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ, ಕಾರವಾರ – 581 301 DISTRICT URBAN DEVELPOMENT CELL D C OFFER 1855

DISTRICT URBAN DEV	ELPOMENT CELL, D.C. OFFICE UT	TÀRA KANNADA DISTRICT, KARWAR,-581 301
08382 22	1170	
Telephone: J 08382 221	170	Email: itstaffdudckarwar@gmail.com
ನಂ.ಡಿಯುಡಿಸಿ–3:ವಿವ: :	2020-21	ದಿನಾಂಕ 2 ೩ –06–2020
¢	ಕಳಯಾಳ ತಾಲೂ ಕಿ ನ ಬಹುಗ್ರಾಣ ಕಾಕವೆಲ್ ನಿರ್ಮಾಣಕ್ಕೆ ಹಳಯಾ ರಾತೆಯಿಂದ ನೀಡುವ ಕುರಿತು.	ನು ಕುಡಿಯುವ ನೀಲಿನ ಯೋಜನೆ ಕಾಮಗಾಲಿಯ ಆ ಪುರಸಭೆ ಮಾಲೀಕತ್ವದ ಜಮೀನನ್ನು ಲೀಜ್ ,
2) 3) 4)	ಮತ್ತು ನ್ಯರ್ಮಲ್ಯ ಉಪ ದಿಭಾ ಸಕಾನಿಇಂ: ಗ್ರಾಕು ನೀ&ನೈ: ನಿವೇಶನ: 2019–20/489 (ಮುಖ್ಯಾಧಿಕಾರಿ ಮರಸಭೆ ಹ ದಿವ: 10: 2019–20/729 ದಿ ಸಹಾಯಕ ಕಮೀಷನರ, ಕಾ ಆಡಆತಾಧಿಕಾರಿಗಳು ಮರಸ ದಿನಾಂಕ: 04–06–2020 ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ನ ದಿನಾಂಕ: 02–06–2003 ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ನ	ಳಯಾಳ ರವರ ಪತ್ರ ಸಂಖ್ಯೇಮ.ಹ:ಭೂಮಿಲೀಜ್:
	ದಿನಾಂಕ: 09-01-2015	·
<u>ಪ್ರಸ್ತಾವನೆ :</u>		• • • •
		ೆ, ಹಆಯಾಳ ತಾಲೂಕಿನ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ
ನೀರಿನ ಯೋಜನೆ ಕಾಮ	ಗಾಲಿಯ ಜಾಕವೆಲ್ ನಿವ	ರ್ಗಾಣಕ್ಕೆ ಹಳಯಾಳ ಪುರಸಭೆ ಮಾಲೀಕತ್ವದ
ದಾಂಡೇಅಯಲ್ಲರುವ ಜಾಕ್ಸ್	ಲ್ ಪಕ್ಕದಲ್ಲ ಲಭ್ಯ ಇರುವ ನ	ಕ್ಕಳ್ತವನ್ನು ಜಾಕ್ <i>ವೆಲ್ ಮತ್ತು ಸಿ</i> ಬ್ಬಂದಿ ವಸತಿ ಗೃಹ
		ಮಾಡುವ ಕುರಿತು ಉಲ್ಲೇಖ (1) ರ ಪತ್ರದಂತೆ
		, -
		ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ.
ಹಆಯಾಳ (ಉ.ಕ.) ಇವ	ರು ದಿನಂತಿಸಿಕೊಂಡಿರುತ್ತಾಂ	ೆ, ಅದರಂತೆ ಮುಖ್ಯಾಧಿಕಾರಿಗಳು ಮರಸಭೆ
ಹಳಯಾಳರವರು ಸದರ ದಿಷ	ಯವನ್ನು ಆಡಳತಾಥಿಕಾರಿಗ	ಳು ಪುರಸಭೆ ಹಳಯಾಳ ರವರಿಗೆ ಮಂಡಿಸಲಾಗಿ
ಸಹಾಯಕ ಕಮೀಷನರ, ಕ್	ಾರವಾರ ಉಪ ದಿಭಾಗ, ಕ	ಾರವಾರ ಹಾಗೂ ಆಡಆತಾಧಿಕಾರಿಗಳು ಮರಸಭೆ
ಹಳಯಾಳ ರವರು ಸದ್ರಿ ವಿಷ	ಯವು ಸಾರ್ವಜನಿಕರಿಗೆ ಕುಂ	ಇಯುವ ನೀರು ಸರಬರಾಜು ಮಾಡುವ ಬಿಷಯಕ್ಕೆ
		ಾಳ ತಾಲೂಕಿನ ತೇರಗಾಂನ್. ಕಾವಲವಾಡ ಮತ್ತು
		ಯೋಜನೆ ಮಂಜೂರಾಗಿರುತ್ತದೆ. ಮತ್ತು ಜಾಕ್ <i>ವೆಲ್</i>
		ಹಳಯಾಳ ಪುರಸಭೆಯ ಜಾಕ್ ವೆಲ್ ಜಾಗೆ ಸ ರ್ವೆ
		ತ್ತರ ವಿಕ್ಕಿಗೆ 17ಮೀ+20 ಮೀ ಅಳತೆ ಜಾಗೆಯನ್ನು

ಜಾಕ್ ವೆಲ್ ಸ್ಥಾಪನೆಗಾಗಿ ನೀಡಲು ಬಿನಂತಿಸಿದಂತೆ ಮತ್ತು ಮರಸಭೆ ಹಳಯಾಳದ ಹಾಅ ಇರುವ ಜಾಕ್ ವೆಲ್ ಜರ್ಣಾವಸ್ಥೆಯಲ್ಲರುವುದರಿಂದ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರು ಯೋಜನೆ ಕಾಮಗಾರಿ ನಿರ್ಮಿಸುವ ಜಾಕ್^{ವಲ್} ನಲ್ಲ ಹಳಯಾಳ ಮರಸಭೆ ವ್ಯಾಪ್ತಿಗೆ ನೀರು ಪೊರೈಸಲು ಭವಿಷ್ಯದಲ್ಲ ಅನುಕೂಲವಾಗಲು ಒಂದು ಹೆಚ್ಚುವಲಿ ಪಂಪ್ ಅಳವಡಿಸಲು ಸ್ಥಳ ಇಡುವ ಕರಾಲಿಗೆ ಒಳಪಟ್ಟು ನಿ.ಟಿ.ಎಸ್. ನಂ BI ನೇದರಲ್ಲಯ ದಾಂಡೇಆಯಲ್ಲರುವ

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ಜಾಕ್ ವೆಲ್ ನ ಪಕ್ಕದಲ್ಲ ಲಭ್ಯ ಇರುವ ಸ್ಥಳವನ್ನು ಗುರುತ್ರಿಸಿ ಒಟ್ಟೂ ಕ್ಷೇತ್ರ ಪೈಕಿ 07 ಗುಂಬ್ಗೆ ನಿವೇಶನವನ್ನು 8 ವರ್ಷಗಳ ಅವಧಿಗೆ ಭೂಬಾಡಿಗೆಯಿಂದ ನೀಡಲು ಉಲ್ಲೇಖ (3) ರ ನಡಾವಳಯನ್ವಯ ಅನುಮೋದಿಸಿರುತ್ತಾರೆ.

ಉಲ್ಲೇಖ (2) ರ ಸತ್ರ ಹಾಗೂ ಉಲ್ಲೇಖ (3) ರ ಟಪ್ಪಣಿಯಂತೆ ಹಆಯಾಳ ತಾಲೂಕಿನ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರಿನ ಯೋಜನೆ ಕಾಮಗಾರಿಯ ಜಾಕವೆಲ್ ನಿರ್ಮಾಣಕ್ಕೆ ಹಆಯಾಳ ಪುರಸಭೆ ಮಾಲೇಕತ್ವದ ದಾಂಡೇಅಯಲ್ಲರುವ ಜಾಕ್ ವೆಲ್ ಪಕ್ಷದಲ್ಲ ಲಭ್ಯ ಇರುವ ಸಿಟಎಸ್ ನಂ. 81 ನೇದರ ಪೈಕಿ ಪಶ್ಚಿಮ ದಿಕ್ಕಿಗೆ 15 ಮೀ * 20 ಮೀ. ಉತ್ತರ ದಿಕ್ಕಿಗೆ 17ಮೀ*20 ಮೀ ಅಳತೆ ಜಾಗೆಯನ್ನು ಜಾಕ್ ವೆಲ್ ಸ್ಥಾಪನೆಗಾಗಿ ಚಾತ್ತ ಮಾರ್ಗಸೂಟ ಬೆಲೆ ಪ್ರತಿ ಚ.ಮೀ ರೂ.1120.00 ರಂತೆ ಒಬ್ಬ ನಿವೇಶನದ ರಕಂ ರೂ.716800.00 ಆಗುತ್ತಿದ್ದು ಆ ಪೈಕಿ ಶೇ.10 ರಷ್ಟು ಪ್ರತಿ ವರ್ಷಕ್ಕೆ ರೂ71680.00 ರಂತೆ ಅಣಜ್ ಮೊತ್ತ ನಿಗಧಿಪಡಿಸಿದ್ದು, ಸದರ್ ಸ್ಥಳವನ್ನು ೦8 ಎರ್ಷದವರೆಗೆ ಅಣಜ್ ನಾತೆಯಿಂದ ಮಂಜೂರಿಸುವ ಕುರಿತು ಉಲ್ಲೇಖ (5) ರಂತೆ ಪ್ರದತ್ವವಾದ ಅಧಿಕಾರವನ್ನು ಚಲಾಯಿಸಿ ಈ ಕೆಳಗಿನಂತೆ ಅದೇಶಿಸಿದೆ.

<u>ಆದೇಶ:</u>

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ಈ ಮೇಅನ ಪ್ರಸ್ತಾವನೆಯಲ್ಲ ವಿವರಿಸಿದಂತೆ ಹಳಯಾಳ ತಾಲೂಕಿನ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರಿನ ಯೋಜನೆ ಕಾಮಗಾರಿಯ ಜಾಕವೆಲ್ ನಿರ್ಮಾಣಕ್ಕೆ ಹಳಯಾಳ ಪುರಸಭೆ ಮಾಲೀಕತ್ವದ ದಾಂಡೇಅಯಲ್ಲರುವ ಜಾಕ್ ವೆಲ್ ಪಕ್ಕದಲ್ಲಿ ಇರುವ ಸಿಡಿಎಸ್ ನಂ. 81 ನೇದರ ಪೈಕಿ ಪಶ್ಚಿಮ ದಿಕ್ಕಿಗೆ 15 ಮೀ * 20 ಮೀ. ಉತ್ತರ ದಿಕ್ಕಿಗೆ 17ಮೀ*20 ಮೀ ಅಳತೆ ಜಾಗೆಯನ್ನು ಜಾಕ್ ವೆಲ್ ಸ್ಥಾಪನೆಗಾಗಿ ಪ್ರತಿ ವರ್ಷಕ್ಕೆ ರೂ.71680.00 ರಂತೆ ನಿಗಧಿಪಡಿಸಿದ ದರವನ್ನು ಅಂಜ್ ಮೊತ್ತ ಎಂದು ಪರಿಗಣಿಸಿ ಅಂಜ್ ನಾತೆಯಿಂದ ಂಶ ವರ್ಷ ಅವಧಿಗೆ ನಿಂಡಲು ಸಹಾಯಕ ಕಮೀಷನರ, ಕಾರವಾರ ಉಪ ವಿಭಾಗ, ಕಾರವಾರ ಹಾಗೂ ಅಡಳತಾಧಿಕಾರಿಗಳು ಪುರಸಭೆ ಹಳಯಾಳ ರವರ ಡಿಪ್ಪಣಿಯನ್ನು ಸ್ಥಿರೀಕರಿಸಿ ಈ ಕೆಳಗಿನ ನಿಬಂಧನೆಗೆ ಒಳಪಟ್ಟು ಆದೇಶಿಸಿದೆ.

<u>ನಿಬಂದನೆಗಳು:</u>

- 1) ಅಣ್ಣನ್ ಅವಧಿ ಎಂಬು ವರ್ಷಕ್ಕೆ ಮಾತ್ರ ಸಿಮಿತ ಇರುತ್ತದೆ.
- 2) ಸುರಸಭೆ ಹಳಯಾಳದ ಹಾಅ ಇರುವ ಜಾಕ್ ವೆಲ್ ಜೀರ್ಣಾವ್ಯವಸ್ಥೆಯಲ್ಲ ಇರುವುದರಿಂದ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರಿನ ಯೋಜನೆ ಕಾಮಗಾರಿಗೆ ನಿರ್ಮಿಸುವ ಜಾಕ್ ವೆಲ್ ನಲ್ಲ ಹಳಯಾಳ ಪುರಸಭೆ ವ್ಯಾಪ್ತಿಗೆ ನೀರು ಪೂರೈಸಲು ಭವಿಷ್ಯದಲ್ಲ ಅನುಕೂಲವಾಗಲು ಕಡ್ಡಾಯವಾಗಿ ಒಂದು ಹೆಚ್ಚುವರಿ ಪಂಪ ಅಳವಡಿಸಲು ಹಳಯಾಳ ಪುರಸಭೆಗಾಗಿ ಸ್ಥಳ ಕಾಯ್ದರಿಸಿ ಇಡಬೇಕು.

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- 3) ಒಟ್ಟು ನಿವೇಶನದ ರಕಂ ರೂ. 716800.00 ಆಗುತ್ತಿದ್ದು, 'ಆ ಪೈಕಿ ಶೇಕಡಾ 10 ರಂತೆ ಪ್ರತಿ ವರ್ಷಕ್ಕೆ ರೂ. 71680.00 ರಂತೆ ರಕಂವನ್ನು ನಿಗಧಿಪಡಿಸಿದ್ದು ಇರುತ್ತದೆ.
- 4) ಪ್ರತಿ ವರ್ಷದ ಆಜ್ ರಕಂವನ್ನು ಆಯಾ ಆರ್ಥಿಕ ವರ್ಷದ ಅಂದರೆ ಏಪ್ರೀಲ್ 30 ರೊಳಗೆ ಭರಣಾ ಮಾಡುವುದು.
- 5) ಪ್ರತಿ ವರ್ಷದ ಅೕಜ್ ರಕಂವನ್ನು ಆಯಾ ವರ್ಷದ ಮಾರ್ಗಸೂಚಿ ಬೆಲೆ ಪ್ರಮಾಣ ಪತ್ರವನ್ನು ಪರಿಗಣಿಸಿ ಶೇಕಡಾ 10 ರಂತೆ ಪರಿಷ್ಠರಣೆ ಮಾಡಲಾಗುವುದು.
- 6) ಸದರ ಸ್ಥಳದಲ್ಲಿ ಯಾವುದೇ ಕಟ್ಟಡ ಕಾರ್ಯಾಗಾರ ವಗೃತೆ ಕಟ್ಟುವ ಪೂರ್ವದಲ್ಲ ಈ ಕಾರ್ಯಾಲಯದಿಂದ ಹಾಗೂ ಸ್ಥಳ ವ್ಯಾಪ್ತಿ ಹೊಂದಿರುವ ದಾಂಡೇಅ ನಗರ ಸಭೆಯಿಂದ ಪರವಾನಿಗೆ ಪಡೆಯುವುದು.
- 7) ಅ೯ಜ್ ಪಡೆಯುವವರು ಸ್ವಂತ ಖರ್ಚಿನಿಂದ ಸದರ ಜಾಗೆಯ ಅ೯ಜ ನೊಂದಣಿಯನ್ನು ಮಾಡಿಸಿಕೊಳ್ಳುವುದು.
- (a) ಜಾಗೆಯನ್ನು ಯಾವ ಉದ್ದೇಶಕ್ಕೆ ನೀಡಲಾಗಿದೆಯೋ ಅದೇ ಉದ್ದೇಶಕ್ಕೆ ಉಪಯೋಗಿಸುವುದು.

والمعالم المعالية ال

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9) ಹೆಳೆಯಾಳ ಸುರಸಭೆ ಹಾಗೂ ಜಾಕ್ ವೆಲ್ ಕಾಮಗಾರಿಯ ನಿವೇಶನಕ್ಕೆ ಜಂಚಿಯಾಗಿ ಅಂಜ್ ನೀಡುವ ಸ್ಥಳಕ್ಕೆ ರಸ್ಟ್ರೆ ಸಂಪರ್ಕದ ಖರ್ಚುವನ್ನು ನಿರ್ವಹಿಸುವುದು.

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10) ಭವಿಷ್ಯದಲ್ಲ ಸದರ ಜಾಗೆ ಹಳಯಾಳ ಪುರಸಭೆ ಕಾರ್ಯಾಲಯಕ್ಕೆ ಅತೀ ಅವಶ್ಯವಿಧ್ಯಲ್ಲ ಪರ್ಯಾರು ವ್ಯವಸ್ಥೆಯನ್ನು ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನೀಯರು ಗ್ರಾಮೀಣ ಶುಡಿಯುವ ಸೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಯಾಳ (ಉ.ಕ.) ರವರು ಮಾಡಿಸಿಕೊಳ್ಳವುದು.

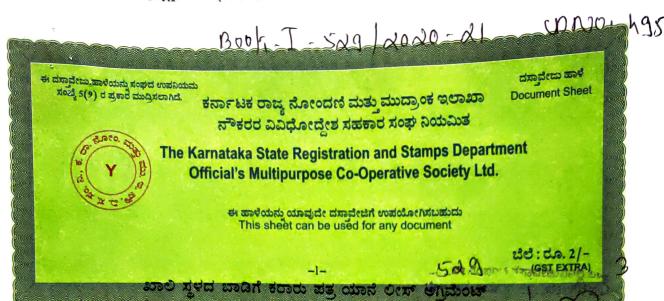
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- 11) ಪ್ರತಿ ವರ್ಷದ ಅಂಜ ರಕಂನನ್ನು ಆಯಾ ಆರ್ಥಿಕ ವರ್ಷದ ಏಪ್ರಿಲ್ 30 ರೊಳಗೆ ಭರಗಾ ಮಾಡುವುದು. ಒಂದು ವೇಳೆ ಅಂಜ ರಕಂ ಭರಗಾ ಮಾಡದೇ ನಿಬಂಧನೆ ಉಲ್ಲಂಫಿಸಿದಲ್ಲ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜನೀಯರು ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ನೈಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ.) ರವರು ಹಳಿಯಾಳ ಮರಸಭೆಗೆ ವಾರ್ಷಿಕ ಅಂಜ್ ನ ರಕಂ ನ ಮೇಲೆ ಶೇಕಡಾ 5 ರಷ್ಟು ದಂಡದ ಸ್ವರೂಪವಾಗಿ ಪ್ರತಿ ತಿಂಗಳಂತೆ ಸದರ ಅಂಜ್ ರಕಂ ಸೂರ್ತಿಭರಗಾ ಮಾಡುವವರೆಗೆ ತಪ್ಪದೇ ಭರಣಾ ಮಾಡುವುದು.
 - 12) ಅರಣ್ಯ ಇಲಾಖೆಯ ಜಮೀನನ್ನು ಅಂಜ್ ಆಧಾರದ ಮೇಲೆ ನೀಡಲು ಆಕ್ಟೇಪಣೆ ಇಲ್ಲದೇ ಇರುವ ಕುರಿತು ಅರಣ್ಯ ಇಲಾಖೆಯ ಒಪ್ಪಿಗೆ ಪತ್ರ ಪಡೆಯುವುದು.

1. ಮುಖ್ಯಾಧಿಕಾರಿ ಮರನಭೆ ಹಳಯಾಳರವರಿಗೆ ಸೂಕ್ಷಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿದೆ. ವ್ರತಿ : 2. ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜನೀಯರ, ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ, ಹಆಯಾಳ (ಉ.ಕ.) ರವರಿಗೆ ಮಾಹಿತಿಗಾಗಿ ಹಾಗೂ ಸೂಕ್ಷಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿದೆ.

١



ಸನ್ 2020 ನೇ ಇಸವಿ ಆಗಸ್ಟ್ ತಿಂಗಳ 20 ನೇ ತಾರೀಖಿನ ದಿವಸ:-(ದಿನಾಂಕ:-20-08-2020)

1.ಮುಖ್ಯಾಧಿಕಾರಿ, ಮರಸಭೆ ಹಳಿಯಾಳ ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ, ಹಳಿಯಾಳ ತಾಲೂಕ, ಮರಸಭೆ ಹಳಿಯಾಳದಲ್ಲಿರುವ ನಾನು (ಸ್ವತ್ತಿನ ಮಾಲೀಕರು) (ಬಾಡಿಗೆಗೆ ಕೊಡುವರೆಂದು ಕರೆಯಲ್ಪಡುವ) ಪಾರ್ಟಿ ನಂ:–1

2.ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ, ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ.) (ಬಾಡಿಗೆದಾರರು) (ಬಾಡಿಗೆಗೆ ಪಡೆದುಕೊಂಡರೆಂದು ಕರೆಯಲ್ಪಡುವ) ಪಾರ್ಟಿ ನಂ:-2

ಈ ಕೆಳಗೆ ಶೆಡ್ಯೂಲ್ ನಲ್ಲಿ ವಿವರಿಸಿದ ಆಸ್ತಿಯು ಪಾರ್ಟಿ ನಂ:–1 ನೇಯವರ ಹೆಸರಿಗೆ ವ ಕಬ್ಜಾದಲ್ಲಿರುವಂತಹ ಸ್ವತಂತ್ರ ಹಕ್ಕಿನ ಆಸ್ತಿಯಾಗಿದೆ. ಅದನ್ನು ಪಾರ್ಟಿ ನಂ:–1 ನೇಯವರು ಪಾರ್ಟಿ ನಂ:–2 ನೇಯವರಿಗೆ ಬಾಡಿಗೆಕೊಡುವ ಅಧಿಕಾರವುಳ್ಳವರಾಗಿರುತ್ತಾರೆ.

ಒಂದನೇ ಪಾರ್ಟಿ ಸ್ವತ್ತಿನ ಮಾಲೀಕರು ಹಾಗೂ ಎರಡನೇ ಪಾರ್ಟಿ ಬಾಡಿಗೆದಾರರು ಒಪ್ಪಿ ಮಾಡಿಕೊಂಡ ಬಾಡಿಗೆ ಕರಾರು ಪತ್ರ ಲೀಸ್ ಅಗ್ರಿಮೆಂಟ್ ದ ಕ್ರಮವೇನೆಂದರೆ,

ಹಳಿಯಾಳ ತಾಲೂಕಿನ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರಿನ ಯೋಜನೆ ಕಾಮಗಾರಿಯ ಜಾಕ್ ವೆಲ್ ನಿರ್ಮಾಣಕ್ಕೆ ಹಳಿಯಾಳ ಪುರಸಭೆ ಮಾಲೀಕತ್ವದ ದಾಂಡೇಲಿಯಲ್ಲಿರುವ ಜಾಕ್ ವೆಲ್ ಪಕ್ಕದಲ್ಲಿ ಲಭ್ಯ ಇರುವ ಸಿ.ಟಿ.ಎಸ್.ನಂ 81 ನೇದ್ದರ ಪೈಕಿ 1)ಪಶ್ಚಿಮ ದಿಕ್ಕಿಗೆ 15ಮೀ x 20 ಮೀ.(2)ಉತ್ತರ ದಿಕ್ಕಿಗೆ 17 ಮೀ. x 20 ಮೀ. ಅಳತೆ ಜಾಗೆಯನ್ನು ಜಾಕ್ ವೆಲ್ ಸ್ಥಾಪನೆಗಾಗಿ ಪ್ರತಿ ವರ್ಷಕ್ಕೆ ರೂ.71,680/–ರಂತೆ ನಿಗದಿ ಪಡಿಸಿದ ದರವನ್ನು ಲೀಜ್ ಮೊತ್ತ ಎಂದು ಪರಿಗಣಿಸಿ ಲೀಜ್ ನಾತೆಯಿಂದ 08 ವರ್ಷ ಅವಧಿಗೆ ಲಭ್ಯವಿರುವ ಸ್ಥಳವನ್ನು ನೀಡಲು ಮಾನ್ಯ ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು ಉತ್ತರ ಕನ್ನಡ ಕಾರವಾರ ಇವರ ಆದೇಶ ಸಂಖ್ಯೆ.ಡಿಯುಡಿಸಿ–3ವಿವ–2020–21 ದಿನಾಂಕ:– 22/06/2020 ಇರುತ್ತದೆ. ಹಾಗೂ ಆಡಳಿತಾಧಿಕಾರಿಗಳು ಪುರಸಭೆ ಹಳಿಯಾಳ ರಚರ ಟಿಪ್ಪಣಿಯನ್ನು ಸ್ಥಿರೀಕರಿಸಿ ಈ ಕೆಳಗಿನ ನಿಬಂಧನೆಗೆ ಒಳಪಟ್ಟು ಆದೇಶಿಸಿದೆ, ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರಿನ ಯೋಜನೆ ಕಾಮಗಾರಿಯ ಜಾಕ್ ವೆಲ್ ನಿರ್ಮಾಣಕ್ಕೆ ಎರಡನೇ ಪಾರ್ಟಿಯವರು ಬಾಡಿಗೆಗೆ ಕೇಳಿದ್ದರ ಮೇರೆಗೆ ಒಂದನೇ ಪಾರ್ಟಿಯವರು ಎರಡನೇ ಪಾರ್ಟಿಗೆ ಈ ಕೆಳಕಂಡ ಬಾಡಿಗೆ ಕರಾರು ಪತ್ರ ಲೀಸ್ ಅಗ್ರಿಮೆಂಟ್ನ್ನು ಮಾಡಲಾಗಿರುತ್ತದೆ.

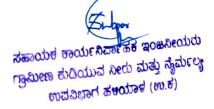
ಪಾರ್ಟಿಗಳು ಒಪ್ಪಿ ಮಾಡಿಕೊಂಡ ಬಾಡಿಗೆ ಕರಾರು ಪತ್ರ ಲೀಸ್ ಅಗ್ರಿಮೆಂಟ್ ದ ಕ್ರಮವೇನೆಂದರೆ,

<u> –:ನಿಬಂಧನೆಗಳು/ ಷರತ್ತುಗಳು:–</u>

1.ಲೀಜಿನ್ ಅವಧಿ ಎಂಟು ವರ್ಷಕ್ಕೆ ಮಾತ್ರ ಸಿಮಿತ ಇರುತ್ತದೆ.

2.ಪುರಸಭೆ ಹಳಿಯಾಳದ ಹಾಲಿ ಇರುವ ಜಾಕ್ ವೆಲ್ ಜೀರ್ಣಾವ್ಯವಸ್ಥೆಯಲ್ಲಿ ಇರುವುದರಿಂದ ಬಹುಗ್ರಾಮ ಕುಡಿಯುವ ನೀರಿನ ಯೋಜನೆ ಕಾಮಗಾರಿಯ ನಿರ್ಮಿಸುವ ಜಾಕ್ ವೆಲ್ ನಲ್ಲಿ ಹಳಿಯಾಳ ಪುರಸಭೆ ವ್ಯಾಪ್ತಿಗೆ ನೀರು ಪೂರೈಸಲು ಭವಿಷ್ಯದಲ್ಲಿ ಅನುಕೂಲವಾಗಲು ಕಡ್ಡಾಯವಾಗಿ ಒಂದು ಹೆಚ್ಚುವರಿ ಪಂಪ ಅಳವಡಿಸಲು ಹಳಿಯಾಳ ಮರಸಭೆಗಾಗಿ ಸ್ಥಳ ಕಾಯ್ದಿರಿಸಿ ಇಡಬೇಕು.

3)ಒಟ್ಟು ನಿವೇಶನದ ರಕಂ ರೂ,7,16,800/-ಆಗುತ್ತಿದ್ದು ಆ ಪೈಕಿ ಶೇಕಡಾ 10 ರಂತೆ ಪ್ರತಿ ವರ್ಷಕ್ಕೆ ರೂ,71,680/-ರಂತೆ ರಕಂವನ್ನು ನಿಗಧಿಪಡಿಸಿದ್ದು ಇರುತ್ತದೆ.



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ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ : 529

ಸಬ್ ರಜಿಸ್ಟ್ರಾರ ಹಳಿಯಾಳ ರವರ ಕಚೇರಿಯಲ್ಲಿ ದಿನಾಂಕ 20-08-2020 ರಂದು 12:55:40 PM ಗಂಟೆಗೆ ಈ ಕೆಳಗೆ ವಿವರಿಸಿದ ಶುಲ್ಕದೊಂದಿಗೆ

		ರೂ. ವೈ
ಕ್ರಮ ಸಂಖ್ಯೆ	ವಿವರ	300.00
1	ನೋಂದಣೆ ಶುಲ್ಕ	350.00
2	ಸ್ಕ್ಯಾನಿಂಗ್ ಫೀ	175.00
3	ಸ್ಕ್ಯಾನಿಂಗ್ ಫೀ	75.00
4	ಪರಿವರ್ತನಾ ಶುಲ್ಕ	
	ಪರಿಶೋಧನಾ ಶುಲ್ಕ	40.00
5	2020 C C C C C C C C C C C C C C C C C C	940.00
	ఒట్న:	

ಶ್ರೀ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ) ಇವರಿಂದ ಹಾಜರ ಮಾಡಲ್ಪಟ್ಟಿದೆ

	ಹೆಸರು	ವೋಟೊ	ಹೆಚ್ಚಿಟ್ಟಿನ ಗುರುತು	ಸಹಿ
	ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ ಇಾ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕೆ)	P		ಸಹಾಯಕ ಕಾರ್ಯನವಾಕಕ ಇಂಜನೀಯ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈವ ಉದ್ರವಭಾಗ ಹಳಯಾಳ (ಉ.ಕ)
ರೆದುಕ್ಕೆ	ೂಟ್ಟಿದ್ದಾಗಿ ಒಪ್ಪಿರುತ್ತಾರೆ			2 O AUC 2020
ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಫೋಟೊ	ಹೆಬ್ಬೆಟ್ಟಿನ ಗುರುತು	ಸಹಿ
1	ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ) . (ಬರೆಸಿಕೊಂಡವರು)			ಕಾಯಕ ಕಾರ್ಯನಿರ್ವಹಕ ಇಂಕಿನಿಕ್ಷಾಂ ಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಕ ಉಪವಿಭಾಗ ಹಳಯಾಳ (ಉ.ಕ)
2	ಮುಖ್ಯಾಧಿಕಾರಿ ಪುರಸಭೆ ಹಳಿಯಾಳ (ಉ.ಕ) . (ಬರೆದುಕೊಡುವವರು)			ಮುಖ್ಯಾಧ್ರಿಕಾರ ತೆರೆಸರ್ ಶೇಯಕ್ (ಉತ)
	, · ·			2.0 AUG 2020



-2-4.)ಪ್ರತಿ ವರ್ಷದ ಲೀಜ್ ರಕಂವನ್ನು ಆಯಾ ಆರ್ಥೀಕ ವರ್ಷದ ಅಂದರೆ ಎಪ್ರೀಲ್ 30 ರೊಳಗೆ ಭರಣಾ ಮಾಡುವುದು

5)ಪೀ ನಿಗದಿ ಪಡಿಸಿದ ವಾರ್ಷೀಕ ರಕಂನ ಮೇಲೆ ಶೇ2% ಹೆಚ್ಚುವರಿ ಮಾಡಿ ಭರಣಾ ಮಾಡಿಕೊಳ್ಳಲಾಗುವುದು.

6)ಸದರ ಸ್ಥಳದಲ್ಲಿ ಯಾವುದೇ ಕಟ್ಟಡ ಕಾಮಗಾರಿ ವಗೈರೆ ಕಟ್ಟುವ ಪೂರ್ವದಲ್ಲಿ ಈ ಕಾರ್ಯಾಲಯದಿಂದ ಹಾಗೂ ಸ್ಥಳ ವ್ಯಾಪ್ತಿ ಹೊಂದಿರುವ ದಾಂಡೇಲಿ ನಗರ ಸಭೆಯಿಂದ ಪರವಾನಿಗೆ ಪಡೆಯುವುದು.

7)ಲೀಜ್ ಪಡೆಯುವವರು ಸ್ವಂತ ಖರ್ಚಿನಿಂದ ಸದರ ಜಾಗೆಯ ಲೀಜ ನೊಂದಣಿಯನ್ನು ಮಾಡಿಸಿಕೊಳ್ಳುವುದು.

8.) ಜಾಗೆಯನ್ನು ಯಾವ ಉದ್ದೇಶಕ್ಕಾಗಿ ನೀಡಲಾಗಿದೆಯೋ ಅದೇ ಉದ್ದೇಶಕ್ಕೆ ಉಪಯೋಗಿಸುವುದು.

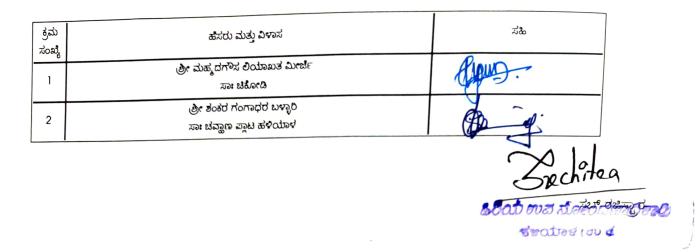
9.)ಹಳಿಯಾಳ ಪುರಸಭೆ ಹಾಗೂ ಜಾಕ್`ವೆಲ್ ಕಾಮಗಾರಿಯ ನಿವೇಶನಕ್ಕೆ ಜಂಟಿಯಾಗಿ ಲೀಜ್ ನೀಡುವ ಸ್ಥಳಕ್ಕೆ ರಸ್ತೆ ಸಂಪರ್ಕದ ಖರ್ಚುವನ್ನು ನಿರ್ವಹಿಸುವುದು.

10.)ಭವಿಷ್ಯದಲ್ಲಿ ಸದರ ಜಾಗೆ ಹಳಿಯಾಳ ಪುರಸಭೆ ಕಾರ್ಯಾಲಯಕ್ಕೆ ಅತೀ ಅವಶ್ಯವಿದ್ದಲ್ಲಿ ಪರ್ಯಾಯ ವ್ಯವಸ್ಥೆಯನ್ನು ಸಹಾಯಕ ಕಾರ್ಯ ನಿರ್ವಾಹಕ ಇಂಜಿನೀಯರು ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ.) ಮಾಡಿಸಿಕೊಳ್ಳುವುದು.

11.)ಪ್ರತಿ ವರ್ಷದ ಲೀಜ ರಕಂವನ್ನು ಆಯಾ ಆರ್ಥೀಕ ವರ್ಷದ ಎಪ್ರೀಲ್ 30 ರೊಳಗೆ ಭರಣಾ ಮಾಡುವುದು. ಒಂದು ವೇಳೆ ಲೀಜ ರಕಂ ಭರಣಾ ಮಾಡದೇ ನಿಭಂದನೆ ಉಲ್ಲಂಘಿಸಿದಲ್ಲಿ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ, ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ.) ರವರು ಹಳಿಯಾಳ ಪುರಸಭೆಗೆ ವಾರ್ಷಿಕ ಲೀಜ್ ನ ರಕಂ ನ ಮೇಲೆ ಶೇಕಡಾ 5 ರಷ್ಟು ದಂಡದ ಸ್ವರೂಪವಾಗಿ ಪ್ರತಿ ತಿಂಗಳಿನಂತೆ ಸದರ ಲೀಜ್ ರಕಂ ಪೂರ್ತಿ ಭರಣಾ ಮಾಡುವವರೆಗೆ ತಪ್ಪದೇ ಭರಣಾ ಮಾಡುವುದು.

12.)ಅರಣ್ಯ ಇಲಾಖೆಯ ಜಮೀನನ್ನು ಲೀಜ್ ಆಧಾರದ ಮೇಲೆ ನೀಡಲು ಆಕ್ಷೇಪಣೆ ಇಲ್ಲದೇ ಇರುವ ಕುರಿತು ಅರಣ್ಯ ಇಲಾಖೆಯ ಒಪ್ಪಿಗೆ ಪತ್ರ ಪಡೆಯುವುದು.

ಸಹಾಯಕ ಕಾರ್ಯ ನಾಸ್ತಹಕ ಇಂಜನೀಯರು ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪವಿಭಾಗ ಹಳಯಾಳ (ಉ.ಕ)

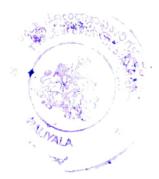


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1 ನೇ ಪುಸ್ತಕದ ದಸ್ತಾವೇಜು ನಂಬರ HLY-1-00529-2020-21 ಆಗಿ ಸಿ.ಡಿ. ನಂಬರ HLYD495 ನೇ ದ್ದರಲ್ಲಿ ದಿನಾಂಕ 20-08-2020 ರಂದು ನೋಂದಾಯಿಸಲಾಗಿದೆ

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-3-<u>-:ಈ ಬಾಡಿಗೆ ಕರಾರು ಪತ್ರಕ್ಕೆ ಒಳಪಟ್ಟ ಆಸ್ತಿಯ ಶೆಡ್ಯೂಲ್:-</u>

ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆಯ, ದಾಂಡೇಲಿ ನಗರ ಸಭೆ ವ್ಯಾಪ್ತಿಗೆ ಒಳಪಡುವಂತಹ ದಾಂಡೇಲಿ ಶಹರದಲ್ಲಿರುವಂತಹ ಆಸ್ತಿಯು ಅದರ ದಾಂಡೇಲಿ ನಗರದ ಸಿ.ಟಿ.ಎಸ್.ನಂ 81, ವಿಸ್ತೀರ್ಣ=4015.11 ಚದರ ಮೀಟರ, ನೇದ್ದರ ಪೈಕಿ ಪಶ್ಚಿಮ ಭಾಗ ದಿಕ್ಕಿನ ಕ್ಷೇತ್ರ= 15ಮೀ x 20 ಮೀ. =300.00 ಚ.ಮೀ. ಉತ್ತರ ಭಾಗ ದಿಕ್ಕಿನ ಕ್ಷೇತ್ರ= 17 ಮೀ. x 20 ಮೀ. =340.00 ಚ.ಮೀ. ಇರುವ ಖಾಲಿ ಜಾಗೆಯು.

ಅಂತಾ ಒಂದನೇ ಪಾರ್ಟಿಯವರು ಮತ್ತು ಎರಡನೇ ಪಾರ್ಟಿಯವರು ಆದ ನಾವು ಪರಸ್ಪರರು ಒಪ್ಪಿ ಮಾನ್ಯ ಉಪ ನೊಂದಣಿ ಇಲಾಖೆ ಹಳಿಯಾಳದಲ್ಲಿ ನೋಂದ ಪಡೆಸಿಕೊಟ್ಟ ಬಾಡಿಗೆ ಕರಾರು ಪತ್ರ/ಲೀಸ್ ಅಗ್ರಿಮೆಂಟ್ ಪತ್ರ ಸರಿ, ಸಹಿ, ಸಾಕ್ಷಿ, ತಾರೀಖು, ಸದರ.

ಯಂಗ್ರಾಂಗ್ ಕ್ರೀ (ಉಕ)

Notestant and for the second றவாக சநிணைத் குற்றுகுத் தில் கில் கிலை கிலை கிலை க (ಎರಡನೇ ಪಾರ್ಟಿ)

ಸಾಕ್ಷಿಗಳು:-

1. ভাস্থার দীর্ম প্রভাষার্চ এক্টের উর্বোটি

2. উত্তত No Mar wy a গুল্ফা কুৱ ক প্ৰকাগ

ದಸ್ಕೂರ ಮಂಜುನಾಥ ಪರಶುರಾಮ ಕೋಳೂರ ಜಲ್ಲಾದಸ್ತು ಬರಹಗಾರರು, ಹಳಯಾಳ Licence No.: DR/DWL/2/2012-13 Cell: 9986123857

90 X

ಕರ್ನಾಟಕ ಸರ್ಕಾರ ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ Department of Stamps and Registration

ಪ್ರಮಾಣ ಪತ್ರ

1957 ರ ಕರ್ನಾಟಕ ಮುದ್ರಾಂಕ ಕಾಯ್ದೆಯ ಕಲಂ 10 ಎ ಅಡಿಯಲ್ಲಿಯ ಪ್ರಮಾಣ ಪತ್ರ

ಶ್ರೀ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಉಪ ವಿಭಾಗ ಹಳಿಯಾಳ (ಉ.ಕ)

, ಇವರು 500.00 ರೂಪಾಯಿಗಳನ್ನು ನಿಗದಿತ ಮುದ್ರಾಂಕ ಶುಲ್ಕವಾಗಿ ಪಾವತಿಸಿರುವದನ್ನು ದೃಡಿಕರಿಸಲಾಗಿದೆ

ಪ್ರಕಾರ	ಮೊತ್ತ (ರೂ.)	ಹಣದ ಪಾವತಿಯ ವಿವರ	
ಚಲನ್	500.00	Challan No CR0820003000324991 Rs.500/- dated 20/Aug/2020	
ఒట్ను :	500.00		

ಸ್ಥಳ : ಹಳಿಯಾಳ

ದಿನಾಂಕ : 20/08/2020

ಉಪ-ನೋಂದಣಿ ಪ ಅದಿಕಾ (ಹಳಿಯಾಳ 200 400

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