

# **ATTACHMENTS**

**(Technical and other descriptive  
information)**

**Managing Director,**  
..... **Urban Water Supply and Sewerage Authority**  
**P.O BOX** .....  
.....

**A. Description of Existing or Proposed Water Supply And Sewerage**

1. Number of Connections by Customer Type (As at [insert date].....)

NO.	CATEGORIES	WATER	SEWERAGE
1	DOMESTIC		
2	INSTITUTIONS		
3	COMMERCIAL		
4	INDUSTRIAL		
5	KIOSKS		
6	Other (specify type in )		
	<b>TOTAL</b>		

2. Population and service area coverage

NO.	DESCRIPTION	NUMERAL
1	Total population in the service area as projected in the recent Census (number)	
2	Population served (number)	
	<b>Percentage Population Served (%)</b>	
3	Total Operation service area (km <sup>2</sup> )	
4	Covered service in km <sup>2</sup>	
	<b>Percentage Area Served (%)</b>	

3. Do you have Map showing existing and proposed Mains and Facilities?

**Mains (YES/NO) .....**

**Facilities (YES/NO) .....**

Please Attach Map showing Water Mains and Facilities .....

Please Attach Map showing Sewerage Mains and Facilities .....

4. Do you have map/s showing Catchments Area/s;

**Map (YES/NO) .....**

5. **Describe type and nature of catchments cover [ text]: .....**

Please Attach map/s of catchment area/s (pdf size 2mb) .....

**Catchments Area A; .....km<sup>2</sup>**

**Catchments Area B; .....km<sup>2</sup>**

**Catchments Area C; .....km<sup>2</sup>**

6. Describe your Water source [ text]: .....

Please Attach copies of water rights (pdf size 2mb)

Please Attach copies title deeds for water sources (pdf size 2mb)

(The location of the water sources and pumping stations to be shown on the operational area map or separate map or as part 3 )

7. Dam and Reservoir

- i. Type of the Dam Construction
  - Concrete Dam .....
  - Earth fill .....
- ii. Year of Dam Construction .....
- iii. Capacity of the Reservoir (in m<sup>3</sup>) .....
- iv. Depth of the Dam (in meters) .....

8. Raw Water Pumping Station

- Total number of Raw water Pumping Station(s) .....
- Design Capacity (m<sup>3</sup>/day); .....
- Actual Capacity in use (m<sup>3</sup>/day); .....
- No. of Pump Units; .....
- Attach Details as shown in the table below; .....

Name and location of Raw Water Pumping Station(s)	Capacity of Station; design and actual (m <sup>3</sup> /day)	No. of Pump Units	Specification of Pumping Units [Q(m <sup>3</sup> /h), H (m), Motor size)	Remarks
	Design ..... Actual .....			
	Design ..... Actual .....			

(NB: Duplicate rows in this Table according to the number of Water Treatment Plants you have)

9. Boreholes

- Total number of boreholes; .....
- Total Design Capacity (m<sup>3</sup>/day); .....
- Actual Capacity in use (m<sup>3</sup>/day); .....
- No. of Pump Units in use; .....
- Attach Details as shown in the table below

Location of the Borehole; .....

Yield (m <sup>3</sup> /h), maximum	
Yield (m <sup>3</sup> /h), minimum	
Depth (m)	
Diameter (inches/m)	
Casing size (inches/m)	
Pump specifications	

(NB: Duplicate this Table according to the number of Boreholes you have)

10. Water Supply and Sewerage Infrastructure Facilities

10.1. Water Treatment Plants,

- Total number of Water Treatment Plants; .....
- Total Design Capacity (m<sup>3</sup>/day); .....
- Actual Capacity in use (m<sup>3</sup>/day); .....
- The flow chart diagram of the Water Treatment Plant .....
- Attach Details as shown in the table below

Name and Location of the Plant	Design and Actual Capacity (m <sup>3</sup> /day)	Description and Type	Coagulants, Disinfectants and other chemicals used	Remarks
	Design ..... Actual .....			
	Design ..... Actual .....			

(NB: Duplicate rows in this Table according to the number of Water Treatment Plants you have)

(The location of the Treatment Plants to be shown on the operational area map part 3 or separate map)

10.2. Boosters,

- Total number of Boosters
- Total Design Capacity (m<sup>3</sup>/day);
- Actual Capacity in use (m<sup>3</sup>/day);
- Attach Details as shown in the table below

Name and location of Booster Station(s)	Capacity of Station; design and actual (m <sup>3</sup> /day)	No. of Pump Units	Specification of Pumping Units [Q(m <sup>3</sup> /h), H (m), Motor size)	Remarks
	Design .....			
	Actual .....			
	Design .....			
	Actual .....			

*(NB: Duplicate rows in this Table according to the number of Booster you have)*

*(The location of the Boosters to be shown on the operational area map part 3 or separate map)*

10.3. Reservoirs (water tanks),

- Total number of Reservoirs; .....
- Total Capacity (m<sup>3</sup>);
- Attach Details as shown in the table below

Name and Location of the Plant	Capacity (m <sup>3</sup> )	Description and Type	Remarks

*(NB: Duplicate rows in this Table according to the number of Reservoirs you have)*

*(The location of the Reservoirs to be shown on the operational area map part 3 or separate map)*

10.4. Water Distribution Systems,

- Total length of Transmission Systems; ..... km
- Total length of Water Distribution Systems; ..... km
- Attach Details as shown in the table below

Diameter(in inches or mm)	Pipe Material and Length (Km)						
	DI	CI	GS	PVC	PTH		
1.5"							
2"							
3"							
4"							
6"							
8"							
10"							
12"							
16"							
20"							
>20"							
<b>TOTAL</b>							

10.5. Sewerage Collection Systems

- Total length of Sewerage Collection Systems: .....
- Total Design Capacity (m<sup>3</sup>/day); .....

- Actual Capacity in use (m<sup>3</sup>/day); .....
- The flow chart diagram of the Wastewater Treatment Plant .....
- Attach Details as shown in the table below

Diameter(in inches or mm)	Pipe Material and Length (Km)				
	DI	CI	GS	PVC	
4"					
6"					
8"					
10"					
12"					
16"					
20"					
>20"					
<b>TOTAL</b>					

10.6. Sewer Pump Stations

- Total number of Sewer Pump Stations: .....
- Total Design Capacity (m<sup>3</sup>/day); .....
- Actual Capacity in use (m<sup>3</sup>/day); .....
- Attach Details as shown in the table below

Name and location of Station(s)	Capacity of Station; design and actual (m <sup>3</sup> /day)	No. of Pump Units	Specification of Pumping Units [Q(m <sup>3</sup> /h), H (m), Motor size)	Remarks
	Design ..... Actual .....			
	Design ..... Actual .....			

(NB: Duplicate rows in this Table according to the number of Stations you have)

10.7. Sewerage Treatment Plants and

- Total number of Sewerage Treatment Plants: .....
- Total Design Capacity (m<sup>3</sup>/day); .....
- Actual Capacity in use (m<sup>3</sup>/day); .....
- Attach Details as shown in the table below

Name and Location of the Plant	Design and Actual Capacity (m <sup>3</sup> /day)	Description and Type	Process applied / Chemicals used	Remarks
	Design ..... Actual .....			
	Design ..... Actual .....			

(NB: Duplicate rows in this Table according to the number of Sewerage Treatment Plants you have)

10.8. Other Disposal Systems.

- Total number of Disposal Systems. ....
- Total Design Capacity (m<sup>3</sup>/day); .....
- Actual Capacity in use (m<sup>3</sup>/day); .....
- Attach Details as shown in the table below

Name and Location of the Plant	Design and Actual Capacity (m <sup>3</sup> /day)	Description and Type	Process applied / Chemicals used	Remarks

	<b>Design .....</b>			
	<b>Actual .....</b>			
	<b>Design .....</b>			
	<b>Actual .....</b>			

*(NB: Duplicate rows in this Table according to the number of Disposal Systems you have)*