WATER INFRASTRUCTURE

Water is essential to life and to provide services such as health, food production, transportation systems, electricity production and firefighting.

Water infrastructure includes water management, managing storm water and sanitary water management and wastewater.

The water infrastructure must guarantee the extraction, collection and drinking water supply in quantity and quality for the long term as the proper handling of waste water so as to ensure public health and executed in the most efficient in the use of energy to ensure its long-term supply.
Its operation requires tools, processes and specialized skills. Water infrastructures are vulnerable to contamination like deadly agents, the release of gaseous chemicals and cyber attacks, so it is essential to implement control systems that are able to manage the risks in the sector.

Water infrastructure must produce potable water, treated water and effectively manage waste waters to meet reliability requirements and regulations so that it can meet the needs of public and environmental health.

Water services must be reliable, responsive and accessible to the client so that he reaches satisfaction.

The infrastructure must be stable, and the conditions must be guaranteed in the long term, ensuring that repair, rehabilitation and replacement is done with minimal disruption to the service.
- Potable water supply, including piping systems, reservoirs, pumps, valves, treatment equipment, gauges including buildings and structures to take care of equipment, used for the collection, treatment and distribution of drinking water.

- Drainage systems and sewage treatment.
o Drainage systems (storm sewers, ditches, etc.)

o Major irrigation systems (reservoirs, irrigation canals)

o Flood control systems (dikes, pumping stations, cams, flood gates)
- Snow Removal including fleet for spreading salt, snow plows, dedicated haul trucks, sidewalk cleaners, dispatch systems and routes for these fixed assets as well as snow melters, snow chutes, etc..

- Management and protection of coasts and channels of streams and rivers, including marine barriers, breakwaters, and flood gates using techniques like sand stabilization, and protection of mangroves and costs.

Source: http://www.artinaid.com/2013/04/water-infrastructure/