

Project Specification

S. No.	Development Work Name	Brief Descriptions with specification
1	Road work*	Bitumen Road (Black Top) with following layers:-
		(a) Natural Subgrade,
		(b) Compacted Subgrade 150-300 mm thick,
		(c) Subbase course 100-300 mm with crushed stone (60-100 mm size),
		(d) Granular Base course 100-300 mm
		(e) Binder course 50-100 mm
2	Footpaths*	(f) Surface course 25-50 mm
		Inter Locking or Grass pavers with following:-
		(a) Size: 200mm x 100mm x 75mm,
		(b) Form: Solid Paving blocks
		(c) Appearance: Standard colour wise with treated surface
		(d) Density: Average 2377.3 kg/cum
3	Water supply including Drinking water facilities*	(e) Composition : OPC + River sand + aggregate
		(a) Water demand assessment- Population estimation, Water use per Capita, Peak demand, Residential and commercial needs, Firefighting etc.
		(b) Water source and treatment- Borewells with 200 ft height, UGT, WT, Treatments- Filtration, Disinfection and following Quality standard
		(c) Storage and Distribution: Storage facilities, Distribution network, GI, CPVC Piping, 24/7 supply, Metering etc.
		(d) Drinking water facilities: Public fountain/Taps, House connections, Water quality monitoring, Awareness.
4	Sewer system*	As per approved drawing and design, through DWC Pipes and manhole as per design are as follows specification:-
		(a) Size: Dia- 150-250mm, and length often standardized at 6 mtr.
		(b) Long service life: 75-100 years, and Lightweight
		(c) Density: 941 kg/sqmtr - 965 kg/sqmtr
		(d) Tensile strength: 20-35 Mpa
		(e) Ring stiffness: Should equal or exceed 4KN/sqmtr

5	Drain*	As per approved drawing and design, the storm water surface drains will be done in brick work and RCC.
		(a) Size: 300mm x 300mm, with thickness often around 60-80mm
		(b) Material of Drain: RCC M-30 Grade concrete.
		(c) Drain Shape: Half U shape Saucer drain using,
		(d) Manhole- Circular and rectangular shape RCC manhole covers,
6	Design for electric supply including street lighting*	As per approved norms of UPPCL and street lights through poles, cabling for domestic connection through sub electrical panels.
		(a) Electrical supply system- Provide and fixing Substations and transformers, Underground cabling with weather resistance cable, Distribution network, Metering and control, Backup power.
		(b) Street lighting system: LED Technology, Lighting zone, Optics, Ingress protection rating, Impact protection rating, Voltage protection etc.
		(c) Poles: Using durable steel material, determine the appropriate pole height and spacing based on road width.
		(c) Safety and Security: Illumination levels-Ensure adequate illumination level for pedestrian safety and security, Emergency Lighting, CCTV Integration etc.
7	Solid waste management and disposal system*	As per approved drawing and design (Garbage collection will be there By Private Hired agencies):-
		(a) Waste Segregation- Mandatory segregation of waste at the source into biodegradable, non-biodegradable and hazardous waste.
		(b) Waste collection: Scheduled and efficient collection of waste from household, commercial establishments, and public spaces.
		(c) Waste transportation: Covered vehicle to prevent spillage and odor during transportation.
		(d) Waste Processing: Compositing, Recycling, Waste-to-energy, Decentralized treatment.
		(e) Waste Disposal: Prioritizing waste reduction, reuse, and resource recovery to minimize the amount of waste sent to landfills.
8	Water conservation system*	Rain water harvesting system as per norms as follows:-

		(a) Key Water Conservation Strategies: Water-Efficient Fixtures, Construction of Rainwater Harvesting = 4 nos., Wastewater recycling, Drought-Tolerant Landscaping, smart Irrigation, Leak detection and repair, stormwater management, water audits.
		(b) Planning and Design Consideration: Demand Forecasting, System Profiling, Regulation and standards.
		(c) Structure: Recharge pits, Recharge wells, Dug wells.
9	Energy management system including use of renewable energy*	Renewable Energy Integration- Solar Power: 5 Kilo watt Implement with photovoltaic (PV) System of roof tops and open spaces to generate electricity.