

Project Specification

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

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

		<p>(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.</p> <p>(b) Planning and Design Consideration: Demand Forecasting, System Profiling, Regulation and standards.</p> <p>(c) Structure: Recharge pits, Recharge wells, Dug wells.</p>
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.