

## Scope of Work

Engineering, supply, and installation of the Domestic Water Supply and Sewage Water Storage System as per the details and requirements provided.

### Requirements:

#### Domestic water supply and storage

- Domestic water piping shall be Schedule 80 CPVC or Type L copper.
- 4 x water tanks shall be provided with a total capacity not less than 5,000-gallons.
- Domestic water tanks shall be interconnected to function as a connected vessel system. Each water tank should have its own isolation valve.
- The water supply line setup shall consist of a 2-inch cam lock for quick and secure connection to a water truck, a water flow meter, and a valve for isolating the line.
- The Domestic (Potable) Water Storage System shall be equipped with a tank level gauge meter and a visual signalization for low water level.
- Duplex domestic water pumps shall be provided, and a control panel for the water pumps needs to be installed.
- Water filters need to be installed on the exterior façade of the office building, positioned in front of the pipe entrance before it enters
- The contractor will connect the external domestic water pumping system to the existing 1" Schedule 80 CPVC pipe positioned on the building's façade. The exact location is to be determined and confirmed by the client on site.

#### Waste water piping and waste water storage

- Sanitary waste and vent piping shall be schedule 40 PVC below grade and cast Iron above grade.
- Septic tanks with underground positioning shall be interconnected to function as a connected vessel system with a total capacity not less than 1,500-gallons.
- Septic tanks shall be equipped with a visual signalization for low water level.  
The contractor will connect the external sewage water piping to the existing 4" Schedule 40 PVC pipe positioned underneath the offices on the east side of the building (see schematic office building and septic tanks and water tanks layout). The exact location is to be determined and confirmed by the client on site.

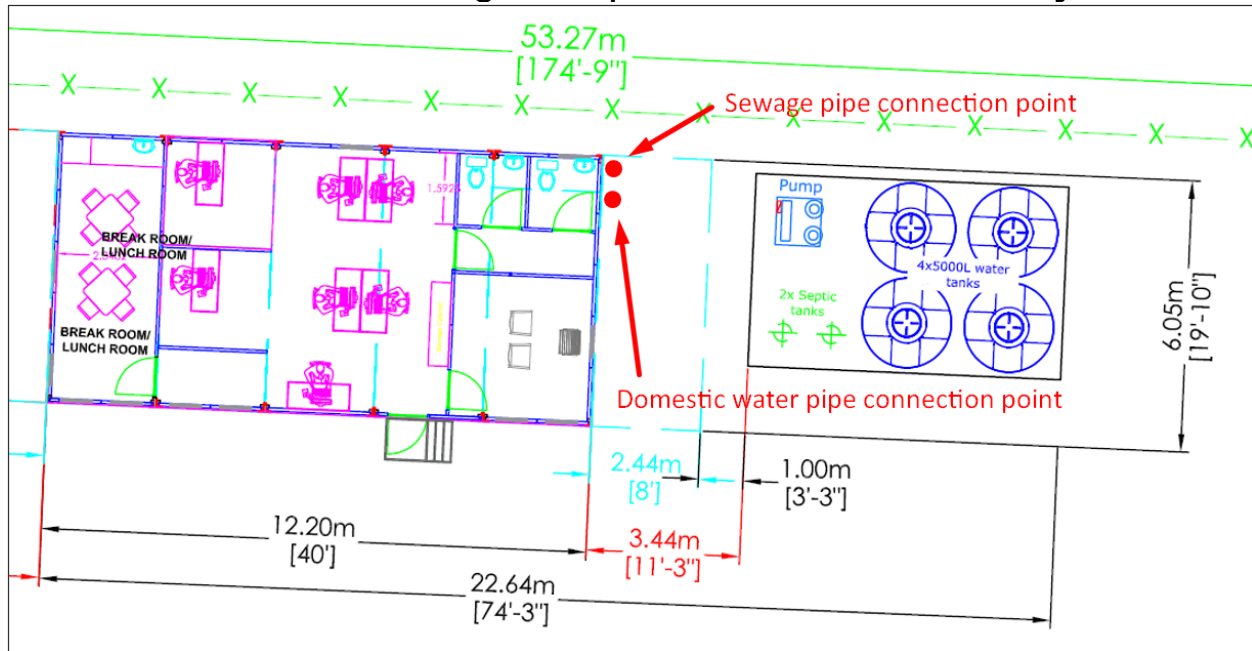
#### Concrete slab with bollards

- A concrete slab shall be cast above the septic tanks, serving as the foundation for the domestic water tanks and duplex domestic water pumps. The dimensions of the slab are to be proposed by the contractor and confirmed by the client.
- Bollards need to be installed along the perimeter and at the corners of the slab. The layout of the bollards is to be proposed by the contractor and confirmed by the client.

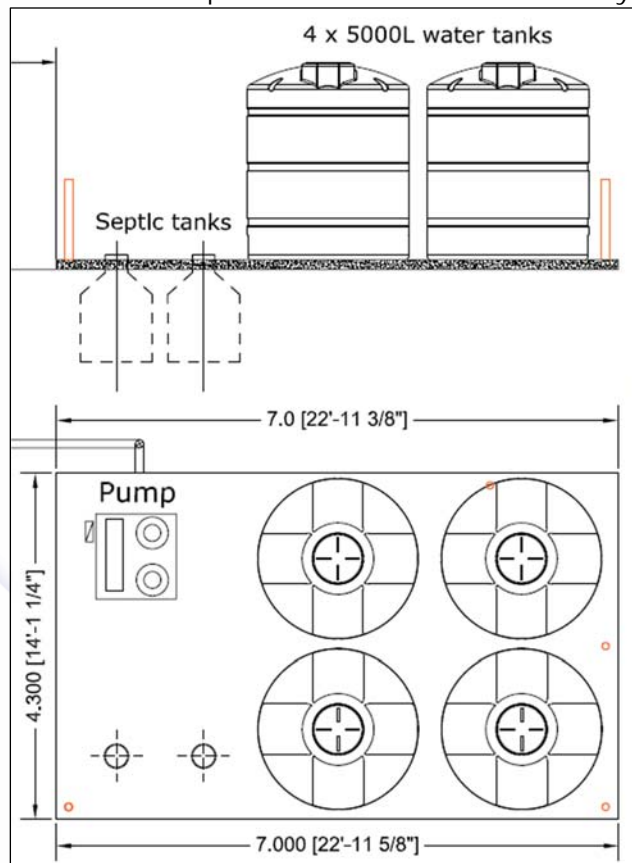
### Deliverables

- Schematic Sketches/Drawings: Provide sketches or drawings of the proposed engineering solutions, detailing the layout and integration of all system components.
- Bill of Materials (BOM): Submit a Bill of Materials listing all components, materials, and quantities required for the project.

**Schematic Office building and septic tanks and water tanks layout**



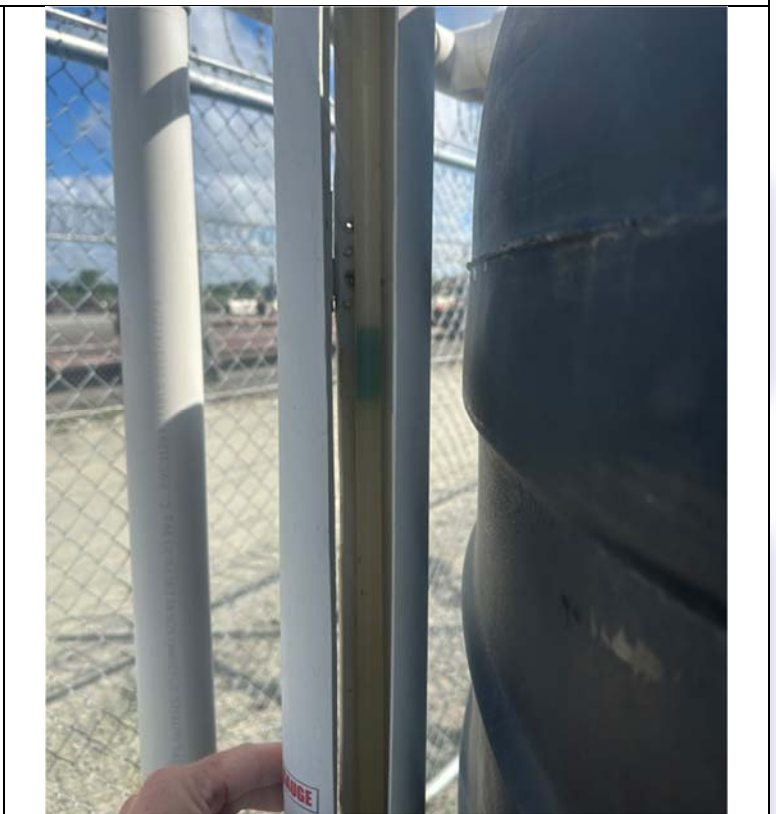
**Schematic septic tanks and water tanks layout:**



### Illustrative Examples for Execution Guidance



Water supply line setup  
1-Cam lock  
2- Water flow meter  
3- Valve





Domestic water tank level gauge

Domestic water tank level gauge



Domestic water tank low level signal

Septic tank high level signal



Concrete slab with bollards

Duplex domestic water pumps with a control panel