

Phosphorus Removal at Small WRCs

Wessex Water
YTL GROUP



Typical Small WRC



Biological treatment:

- Trickling filter; or
- RBC

Sludge storage:

- Sludge drying beds; or
- Sludge storage tanks

Secondary treatment:

- Upflow settlement tank

Preliminary treatment:

- Manual screen; or
- Macerator; or
- Mechanical screen

Primary treatment:

- Septic tank; or
- Upflow settlement tank

Typical P Removal Scope

Essential scope:

- Chemical Dosing
- Chemical Delivery Infrastructure

Site-dependant scope:

- Potable water supply & booster pumps
- Inlet screening & handling
- Additional primary settlement & auto-desludging
- Additional biological treatment
- Additional secondary settlement & auto-desludging
- Tertiary solids removal
- Sludge storage tanks
- Interstage pumping stations

Chemical Dosing Solution Examples

- Chemical Dosing
 - Chemical dosing plant
 - Dosing lines and point of application box
 - Mixing/flocculation

- Chemical Delivery Infrastructure
 - Concrete delivery bund
 - Drainage and isolation valve
 - Emergency shower
 - Washdown standpipe



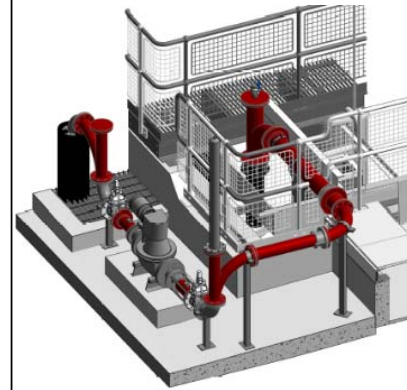
Site Dependent Scope Examples



Inlet Screening



Sludge storage



PST auto-desludging



Potable Booster Pumping Station