

Drip Distribution System - Monaghan Direct Provision Housing 160 pe

An upgrade to 3 overloaded wetlands was urgent as the adjoining stream was heavily polluted with the sewage and feeding into a sensitive catchment. It was a difficult site due to tight clay soils and a high watertable with mottling at 400mm.

A drip distribution system was designed by Ashtecs to improve a difficult situation. The drip tubing was mole ploughed into two fields 150mm below ground level and completed in April 2015. The dripline was Geoflow pressure compensating with root inhibitor and anti-microbial coating.

A significant improvement in stream water quality resulted with deeper groundwater quality continuing to improve.

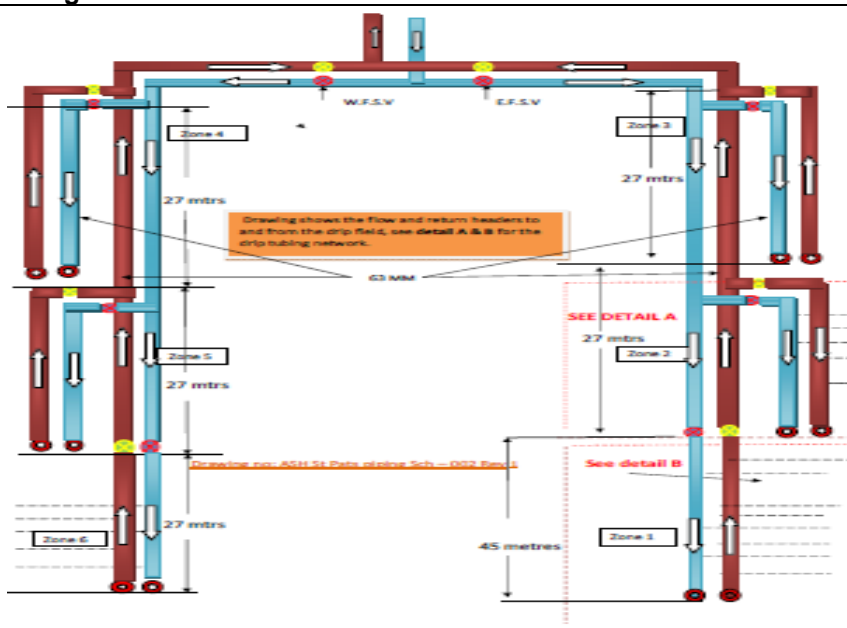
Design details:

| | |
|---------------------|---|
| Flow: | 24,000 litres/day |
| Wastewater quality: | Secondary treated domestic strength wastewater. |
| Infiltration rate: | 3 l/m ² /day |
| Area: | 8,000 m ² |
| Nominal dimensions: | 6 equal zones |
| Pump capacity: | 150 litres/min |
| Head (TDH): | 35 metres |



Overloaded wetlands were polluting the adjoining stream.

Design Schematic - 6 cells in 2 fields



Secondary treatment system



PVC manifolds to multiple cells with solenoid valve controlling sequential 6 zone dosing.



Servicing by Ashtecs



Dripfield operating satisfactorily 6 months after installation



Water quality of adjoining stream is significantly improved