

# Secondary Treatment



**Client:** South West Water  
**Location:** South Knighton, Devon  
**Commissioned:** 2006  
**Purpose:** Secondary Treatment after Septic Tank  
**Effluent Type:** Sewage



**Scope of Work:** ARM Ltd designed and installed a septic tank followed by a vertical flow reed bed treatment system to treat the effluent from the septic tank. Vertical flow beds have increased oxygen transfer that achieves better removal of ammonia.

## Design Parameters:

Average Flow 16m<sup>3</sup>/d

Consent Requirements

BOD: 40 mg/l

SS: 60 mg/l

Pre-treatment Septic tank

## Design Solutions:

Bed Type 2 Vertical flow beds

Bed Size 110 m<sup>2</sup>

Plant Species *Phragmites australis*

Bed Matrix Gravel