J418-10 Fylingthorpe Sewage Pumping Station



# Design and Access Statement

NYMNPA

MMB Scheme No J418
YWS Scheme No D0053
Date of Application 05-08-2011

#### BACKGROUND

The existing Fylingthor Pe Sewage Pumping Station (SPS) is located to the east of the village on Fylingthorpe and accessed from Thorpe Lane along a track on the line of the disused railway. The existing mechanical and electrical plant items are currently housed in a traditionally constructed stone faced building with gable ended, duo-pitched, slate roof. Investigations, as part of Yorkshire Water Ltd's Asset Management Period 5 (AMP5) capital programme, have identified that there is a significant risk of plant failure that presents an unacceptable level of risk of Environmental Pollution if left unresolved.

Consequently, the existing pumps are to be replaced with new pumping equipment which will address the risk of environmental pollution, reinforces Yorkshire Water Ltd's commitment to improve bathing water quality for the region and ensure the installation complies with Yorkshire Water's Engineering Specification. The new pumps and associated equipment will be located in a building which affords safe access for future operation and maintenance, whilst enabling the existing pumping station to remain operational throughout the construction period.

The design and selection of the new plant items and associated control equipment has been discussed and agreed by Yorkshire Water Services in conjunction with its Capital Partners, Mott MacDonald Bentley.

#### CONTEXT

The proposed site is adjacent to the existing Fylingthorpe Sewage Pumping Station building. A new building will be constructed to house the new pumping plant. The new building will be a free standing structure in the style of a traditional agricultural building / field barn with masonry infill from ground level to a height of approx 1.0m, timber 'Yorkshire Boarding' cladding to the walls and gables and pitched roof with 'Big 6' fibre cement sheet roof covering.

A new plant room is required as the existing pumping station is to remain in operation during the course of the works. Therefore the existing plant cannot be removed prior to construction. In addition, the existing building is not suitable to house the new pumps as there is insufficient space and head room to house, operate and maintain the equipment.

The hydraulic "power packs" required for the new plant have been identified as equipment which will potentially generate a high level of noise. For health and safety reasons a decision has been made to separate the power packs from the new pumps and locate them within a separate enclosure within the new building. This will enable routine maintenance of the new pumps to be carried out without

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operatives being exposed to the noise of the power packs or posing additional secondary risks associated with mitigation methods, such as ear defenders, which would otherwise be required.

The three power packs will each be housed in a separate acoustically damped plantroom to mitigate the noise impact on the surroundings.

It is not anticipated that the resultant noise levels, when measured at the boundary, will be at a higher level than would be currently experienced.

The proposed design will have no impact on the social or economic context of the area, as it won't affect access via the footpath, nor will it affect traffic movements and will therefore have no impact over and above the existing use.

Further to the considerations of necessity for the project, health and safety implications of the facility and mitigation of potential visual and noise impacts etc. we believe the proposal to be appropriate.

### **Involvement of Community members**

Further to advice received from North York Moors National Park Authority planning department the Yorkshire Water Community Engagement Team have been briefed on the content of the application and liaison with the parish council and ward councillors is ongoing.

#### DESIGN

## Amount, Scale and Layout

We are proposing the construction of a new steel framed timber clad agricultural style building adjacent to the existing building to the south west. The building style is such that it break up the visual impact of existing building and look more in keeping with a traditional cluster of agricultural type buildings, more in keeping with the nature of local land use.

The new build will be approximately 5.0m in height from ground to eaves level and 6.0m in height from ground to ridge level on each gable. The approximate plan area of the new plant room is  $105\text{m}^2$ , 15m length x 7m width.

In order to limit the impact on the surroundings the configuration of plant within the building has been optimised to minimise the required plan area of the building whilst providing safe access for operation and maintenance.

The existing chemical dosing plant which is currently located within the area proposed for the construction of the new plant room is to be relocated to the north of the existing building. The existing unit significantly lower that the ridge level of the existing building and once relocated will be shielded from view by the new building and existing topography.

The existing site access track to the west of the existing building will be Imodified to allow vehicular access to the main door.

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# Landscaping

Modification of the access track and footpaths will match the construction of the equivalent existing areas. The surface runoff from these areas will drain to surrounding soft landscaping where possible and into the existing wet well of the pumping station. Any other landscaping which is affected during the course of the works will be returned to the existing condition.

# Appearance

On completion of the construction works, the new plant room will be the only major addition to the visual appearance of the site. The new building will be constructed in materials in keeping with those of a typical agricultural building/barn. The doors will be coloured to blend in.

The existing chemical dosing equipment is to be relocated close to an existing area of trees and bushes, hiding it from view from the east and enabling the green colour of the equipment to blend into the existing view from the west. It will also be obscured by the adjacent topography and new building.

The existing post and rail fence, which forms the western boundary to the site, will be moved westward and southward to an alignment corresponding with the line of Yorkshire Water Ltd ownership as of October 1999. There will be no other new boundaries.

External security lights similar to those on the existing building will be installed on all elevations.

### **ACCESS**

The existing access route to the site from Thorpe Lane and along the dismantled railway will remain. This will only be used by YW vehicles/personnel and their agents. It is anticipated that there will be no change to the existing site maintenance regime. Site visits will remain at the same frequency as existing at about 4-5 vehicles per week. There will be no impact on public transport, or other traffic and pedestrian movements.

Any new access covers will be secure heavy duty covers, and access to the site areas will be a dedicated Yorkshire Water suite of Abloy security locks.